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ABSTRACT

This report illustrates how people with purpose and resourceful imaginations have transformed the discarded, overlooked, and inexpensive spaces or objects of an abundant and sometimes wasteful society into useful places and things for child-oriented learning. The document is organized into (1) Types of Places, in which illustrations demonstrate the wide variety of unlikely structures that have been converted into viable educational spaces -- e.g., often lofts, Victorian homes, urban storefronts, and office buildings; (2) Furniture and Equipment, which features imaginative uses of manufacturers' "throwaways" (from carpet rolls to packing crates) for fashioning into gymnastic mazes or complicated assemblies; (3) Outdoor Spaces, which points up the possibilities in city rooftops and vacant lots for solutions to urban play space problems; (4) Outdoor Things, illustrating how outdoor play materials can be "scrounged" or bought cheaply at places such as lumber yards, telephone companies, construction sites, or marinas; and (5) How To Go About It, which provides sources for help, licensing requirements and codes, and a checklist of found items. An appendix includes a bibliography and a directory of the centers described herein. (Photographs may reproduce poorly.) (Author/MLF)

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found spaces and equipment for children's centers

A report from Educational Facilities Laboratories

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foreword

"We like to think of America as a child-oriented society, but our actions belie our words." So declares a background report at last year's White House Conference on Children. Given the pressing need for preschools and day care centers and the meager funds thus far allotted for them by an affluent nation, it is difficult to disagree.

But what of the persevering activities by thousands of parents, teachers, concerned citizens, and community groups (the people, yes) who have borrowed, adapted, and improvised to create facilities and programs for nurturing the emotional and intellectual growth of small children? Their "child-orientation" cannot be denied. And it is for them that this book is written.

But in a sense, it is also written by them. It is a compilation of resourceful, creative ways, to quote from the text, "for transforming the discarded, overlooked, and inexpensive spaces and objects of an abundant and sometimes wasteful society into useful places and things for learning." Many of the examples offered are the work of nonprofessionals, not planners or architects, but everyday folk spurred to inventiveness by need. To be sure, there are samples included where designers and architects have contributed their skills. And there are also offerings from the European experience, because they arrived before we did at the concept of informal, freer places and procedures for early childhood learning. Early on, the English and Scandinavians eyed junk and found objects with a special vision and have used them with élan in childhood programs.

Such programs may operate in preschool or day care centers. No distinction is made between them in this report since found places and objects can be used with equal success in either type. (Technically, preschools offer intensive educational, part-day programs, and are based on a school calendar, whereas day care centers are open for the entire day on a full-year basis. While the latter have been principally custodial in function, there is increasing recognition of their responsibility for "learning" as well.)

In any case, all the examples presented are intended to offer parents, teachers, administrators and designers ideas for developing their own facilities with minimal start-up cost.

As the readers of this report will know better than any statistics can say, the poorer a family is, the less likely that its children are enrolled in a preschool or a day care center. In 1970 there were nearly 11 million youngsters between the ages of three and five. Only 4.1 million of them, or 37.5 percent, were enrolled in preschools. And most of these came from families whose annual income was $10,000 or more. Thus, it is the population at the lower end of the income scale that is most in need of facilities and programs and least able to afford them. And that is where inexpensive, reclaimed places and things enter the scene. This does not mean that these are second best to be used when the "real" thing cannot be afforded. This report repeatedly illustrates that found things and spaces have their own unique values, and for all children, rich or poor, they can create a world more exhilarating than the finished and the store-bought.

This book was prepared for EFL by Richard J. Passantino, a Washington, D.C., architect with two small children of his own and a dedicated involvement in the design of early childhood facilities. Dick Passantino visited scores of preschools and day care centers in this country and abroad. Many more centers were surveyed than could be included here, but EFL wishes to thank all the teachers, parents, designers and administrators who gave generously of their time to help compile the information.

EDUCATIONAL FACILITIES LABORATORIES

children and space

This report illustrates how people with purpose and a resourceful imagination have transformed the discarded, overlooked and inexpensive spaces or objects of an abundant and sometimes wasteful society into useful places and things for learning. To the young child such materials and spaces take on intrinsic values; they have a character all their own—full of new impulses for learning. In such a seemingly ambiguous atmosphere teachers can capitalize on children's natural inventiveness and effectively prepare the learning environment.

Students of child behavior are now discovering that young children may be more acutely responsive to their environment than are older children or adults who have the capacity to tune out distracting or nonessential elements of their surroundings. A 3- or 4-year-old child relates directly to his unique "bubble of air" and is more readily inspired or turned off under its influence. Small children seem to change their mental responses like a chameleon.

So, it follows that unimaginative space has a negative learning value. An environment that has become static and oppressive in its bland emptiness is an opportunity lost for a vibrant and impressionable young child. For him, every new impulse to the senses is a cause for alert study which leads to the development of all his faculties. This eventually will help him to make his adult life richer and to achieve his highest intellectual and emotional potential.

Fortunately "found space" can fulfill the environmental requirements for child development and do so at economical cost. The advantages of found space are numerous. A child jumping into a pile of hay in a converted barn, a group listening to a story in front of an ornate Victorian fireplace, children swinging from ropes suspended from a high ceiling—all marvelous learning experiences, and all capitalize on existing features in found spaces. The rooftop view of a city skyline is already there, and so is the great rambling front porch for rainy weather play—expensive features if they were to be built new, but great free assets when they happen to exist.

Converting an existing building also provides financial advantages, since no time need be spent in finding land or in major construction. Mortgage financing is simplified, or the existing loan might be assumed in cases where purchase is considered. Frequently the owner of an abandoned or sparsely used space may permit it to be used as an early learning center with little or no initial capital investment; or perhaps he will permit shared use of common space without a conflict of functions, e.g., a preschool and a Sunday school, or preschool and community rooms in a housing project.

As the illustrations in this report suggest, it is generally more economical to reclaim existing spaces in structurally sound buildings than to build new structures. This can be done without compromising either educational purpose or functional design.

After developing the facilities for a children's center, the group managing it still faces the problem of operating costs. Experts in early child care generally agree that high quality day care centers cost more to run than most parents can afford to pay. Hence day care centers cannot be run for profit unless they are subsidized, charge high tuition fees or offer services that are below the optimum requirements. These requirements are: educationally oriented programs, an adequate and qualified staff, well-designed and equipped learning spaces, and nutritionally balanced meals.

The federal government believes that quality day care costs a minimum of $1,600 annually for each child, but this figure appears optimistic to many people in the preschool business. One reason for the low estimate is that the government, through the Department of Agriculture, provides many services, such as free food and milk, that are not included in the $1,600.

Also, the length of a preschool day affects the cost. If the center is to be open before working mothers leave their children and not close until they pick them up, the center must pay its staff overtime or employ two shifts. Either way, the costs will exceed those for a center that is open only eight hours a day.

A consensus among experienced preschool operators is that it costs between $2,000 and $2,500 a year for each child, if the center is to meet the accepted requirements. Therefore, to cover operating costs, a center would have to charge a minimum of $40 a week per child. Since few parents can afford these fees, even nonprofit centers have to be subsidized in order to maintain acceptable services.

Awareness of these facts has stimulated pending federal legislation to aid day care and child development centers. However, appropriations alone are not the solution. Better financing must be accompanied by the realization that preschool education is a valuable experience for all children and should not be considered a poor substitute for home and mother.

There is no such thing as a standard environment for a preschool or day care center because a successful center depends more on atmosphere —a creative learning atmosphere—than on its enclosure. This does not mean that space design and location are insignificant, but that existing facilities can be made into exciting places for early learning despite their original state. The illustrations in this section are intended to demonstrate the wide variety of unlikely structures that have been cannily converted into viable educational spaces. The examples range from the open expanse of a loft permitting limitless flexibility, to the Victorian frame house with its tightly defined interior room arrangements, fireplaces, and large porches. Other centers are featured for their locations in urban storefronts, office buildings, farms, churches, or in the residential settings of houses, apartment buildings and garden apartments. The degree of remodeling varies greatly from minimal space revisions to all-out "wall-to-wall" renovation.

I. types o

7

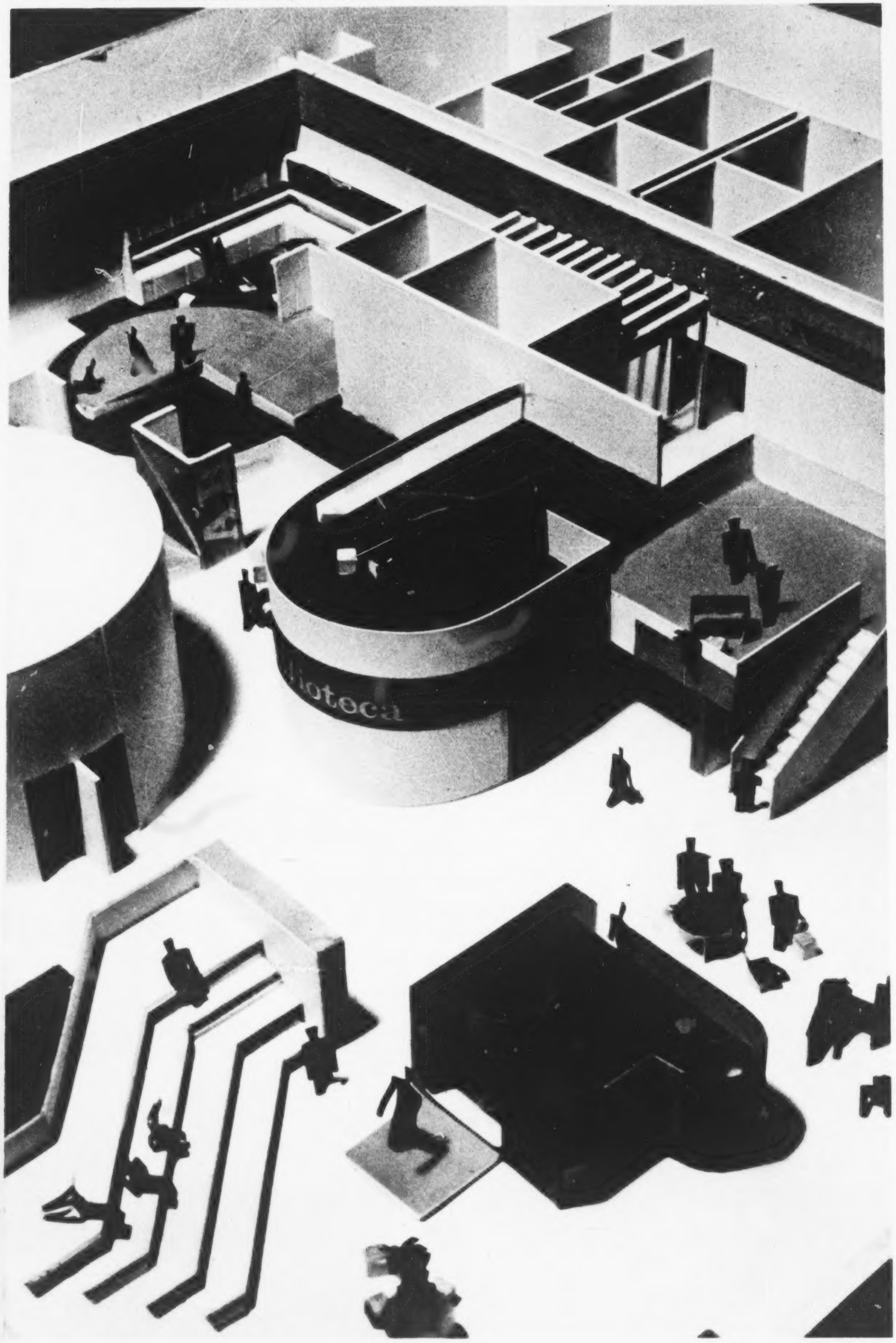
places

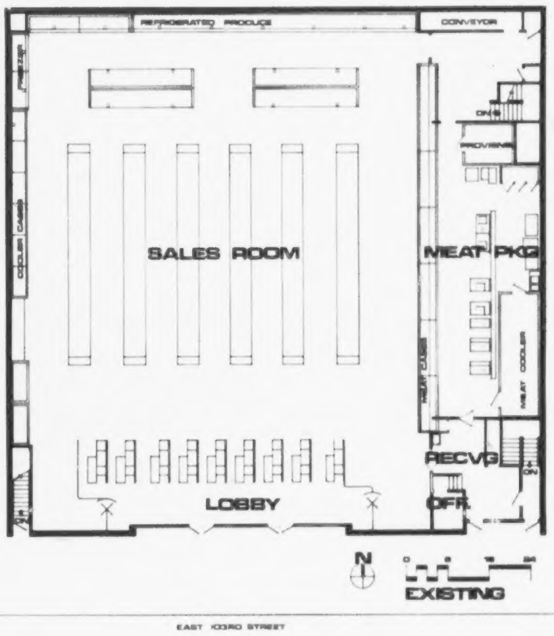
supermarkets
warehouses
small stores
residences
apartment buildings
office buildings
churches
old public schools
farm buildings

I.types of places

supermarkets

EAST HARLEM PRESCHOOL, NEW YORK CITY




REFRIGERATED PRODUCE
CONVEYOR
FREEZER
COOLER CASES
SALES ROOM
MEAT PKG
PROVISIONS
DN
MEAT CASES
MEAT COOLER
RECVG
OFF.
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0
8
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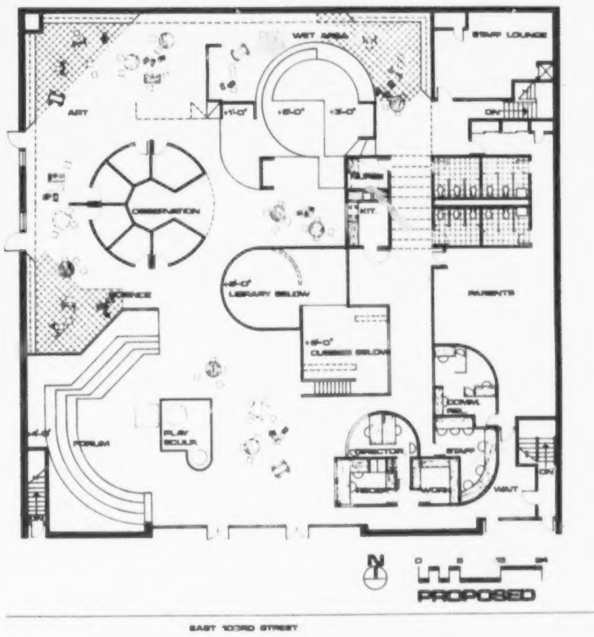
EXISTING
EAST 103RD STREET

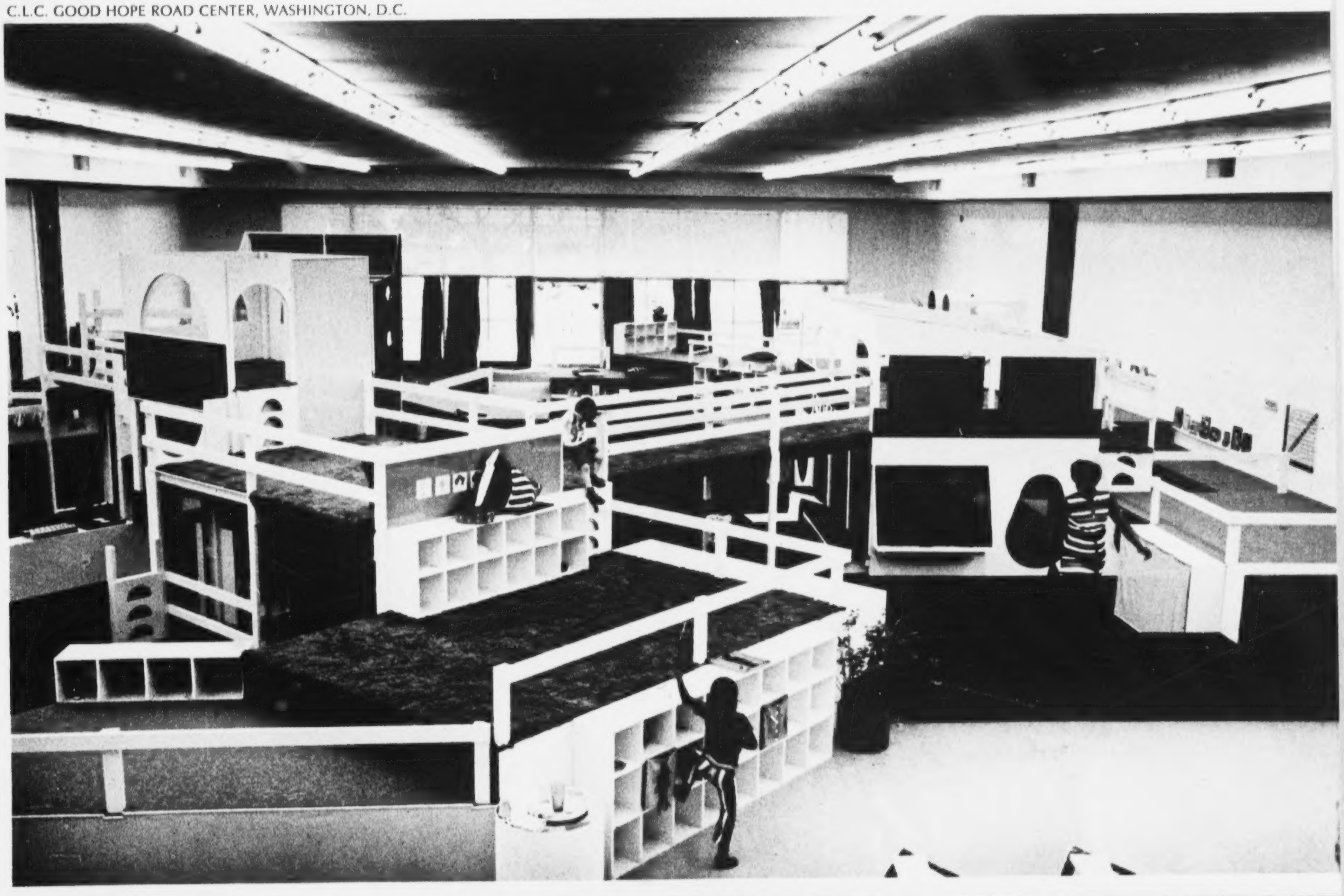

WET AREA
STAFF LOUNGE
ART
+1'-0"
+6'-0"
+3'-0"
DN
NURSE
KIT
OBSERVATION
SCIENCE
+6'-0"
LIBRARY BELOW
PARENTS
+6'-0"
CLASSES BELOW
COMM. RM.
PLAY SCULP.
FORUM
DIRECTOR
STAFF
RECEPT
WORK
WAIT
N
0
8
16
24
PROPOSED
EAST 103RD STREET

Former supermarket will be converted into a day care center for 90 children and a neighborhood center. The raised sections make interesting learning places for the children in an otherwise large flat area, and increase the usable floor space.

supermarkets

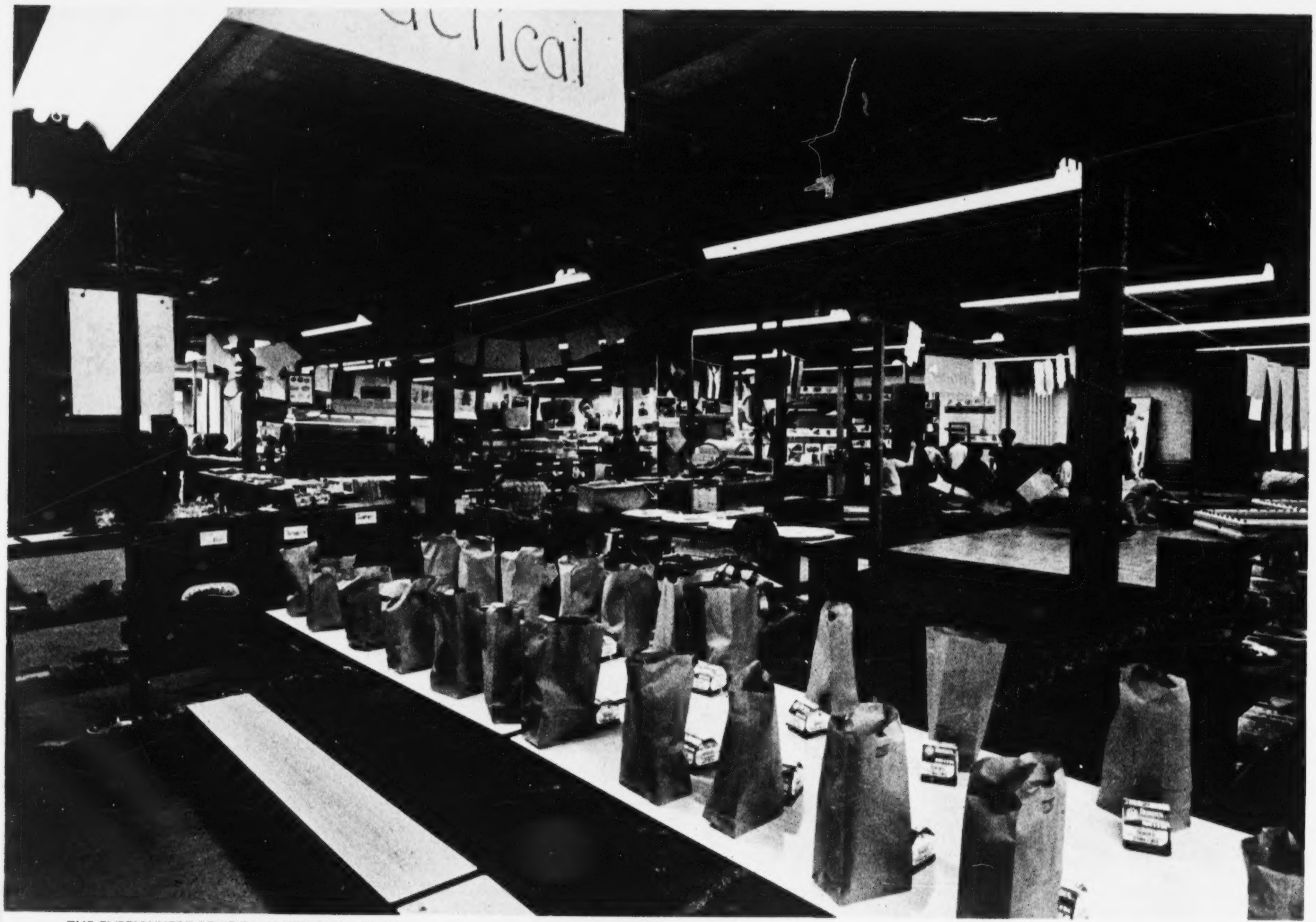
A landscape of platforms, bridges, storage, and nooks and crannies was built in an old store by amateur carpenters. The all-day center accommodates 100 children of employees at a telephone company.

C.L.C. GOOD HOPE ROAD CENTER, WASHINGTON, D.C.



I. types of places

warehouses

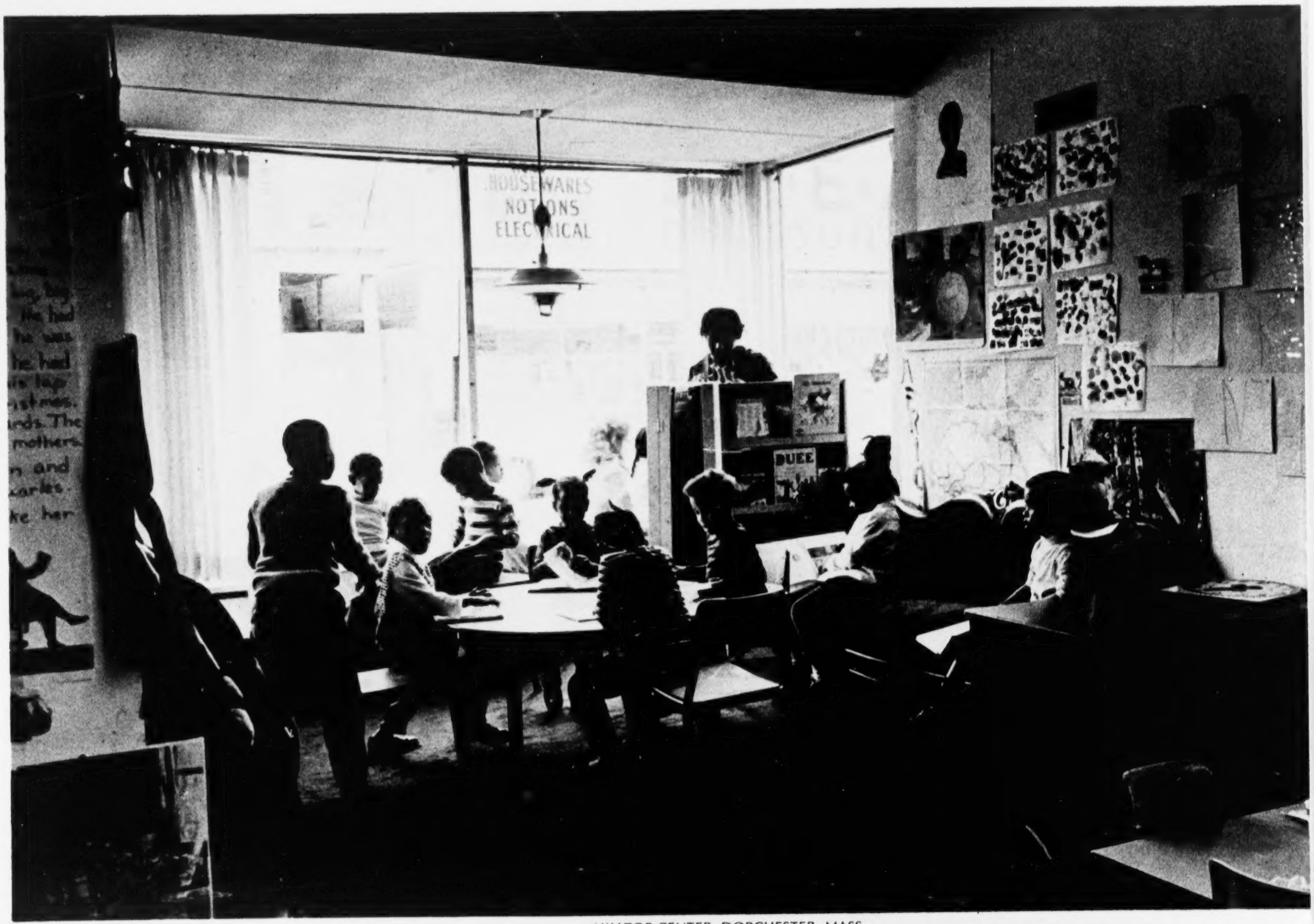


THE EVERYWHERE SCHOOL, HARTFORD, CONN.

Carpets and paint helped transform a shabby warehouse into a lively small K-3 school. Children move planks and boxes around to make seats, benches, desks or tables.

small stores

Large windows in former store display children's activities to the community and help raise public interest in the project. About 90 children between 3 and 5 years old attend.


HOUSEWARES
NOT ONS
ELEC RICAL

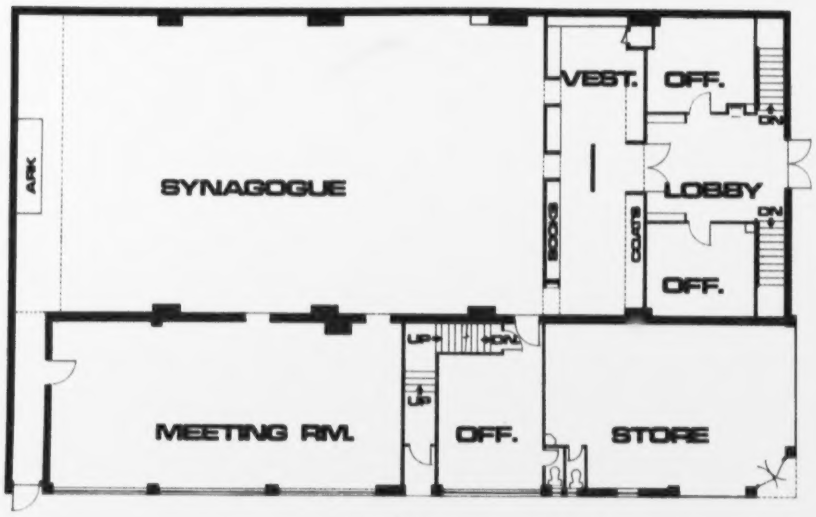
HILLTOP CENTER, DORCHESTER, MASS.

I. types of places

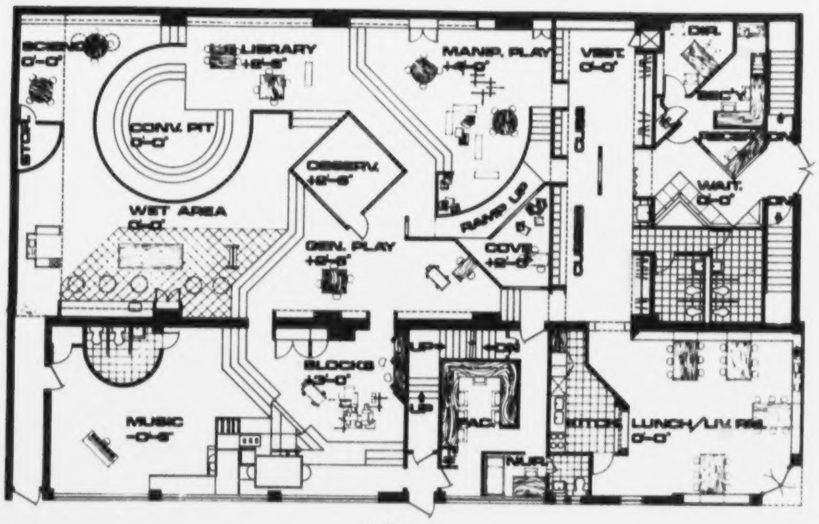
small stores

THE BLOCK SCHOOL, NEW YORK CITY

Variations in levels break up the spaces once occupied by a synagogue and a store. Parents of 80 preschoolers did a lot of the alteration work.


ARK
SYNAGOGUE
BOOKS
COATS
VEST.
OFF.
LOBBY
DN
OFF.
MEETING RM.
UP
DN
OFF.
STORE

Before


SCIENCE
0'-0"
LIBRARY
+2'-6"
MANIP. PLAY
+4'-0"
VEST.
0'-0"
DIR.
SEC'Y
RECEPTION
STOR.
CONV. PIT
0'-0"
OBSERV.
+2'-6"
WAIT.
0'-0"
WET AREA
0'-0"
GEN. PLAY
+0'-6"
RAMP UP
COVE
+2'-0"
CUBB.
DN
BLOCKS
+3'-0"
UP
DN
MUSIC
-0'-6"
FAC.
NUR.
KITCH.
LUNCH/LIV. RM.
0'-0"

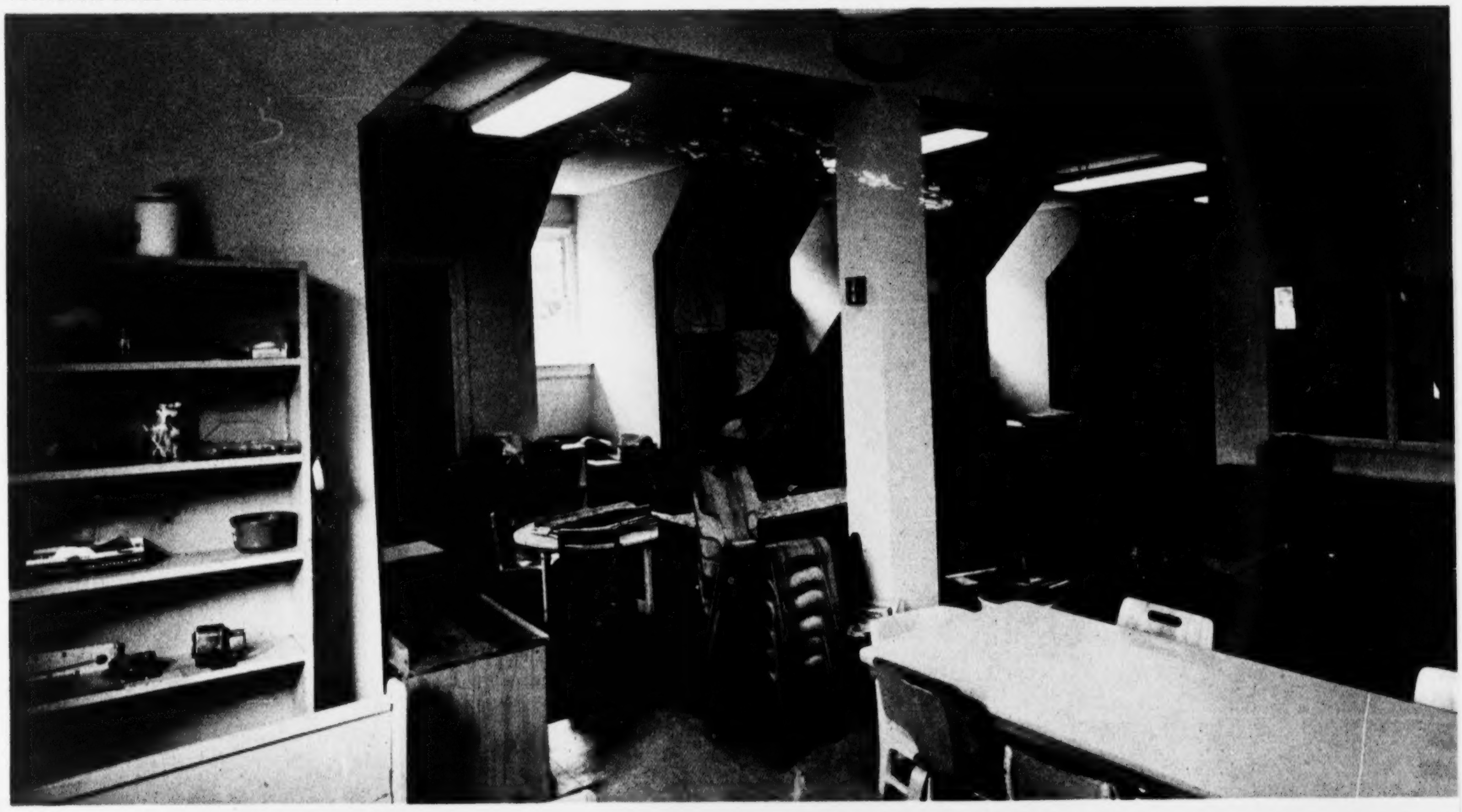
After

THE NEW NURSERY SCHOOL, GREELEY, COLO.

A small suburban house serves as a preschool for 30 children on split sessions. The school is financed by the U.S. Office of Economic Opportunity and a state college that uses it as an early education laboratory.

residences

NATIONAL CHILD RESEARCH CENTER, WASHINGTON, D.C.

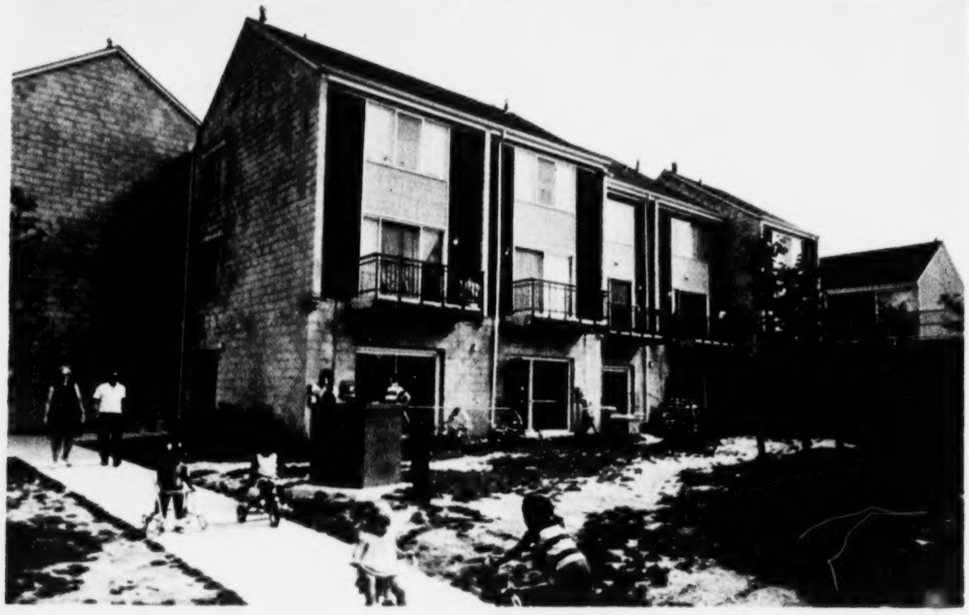


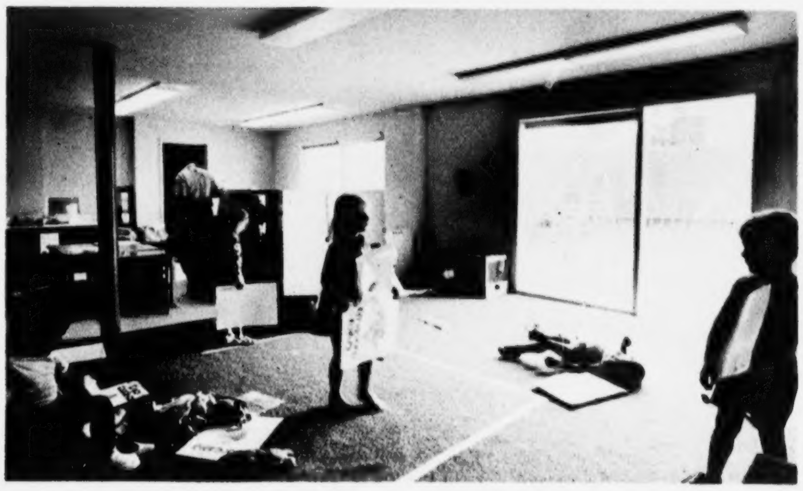
A Victorian mansion remodeled for 140 preschool children provides gracious spaces not often found in children's centers. It also serves as a research center for early education.

14 c.t

I.types of places

THE ROSLYN RISE DAY CARE CENTER, COLUMBIA, MD.

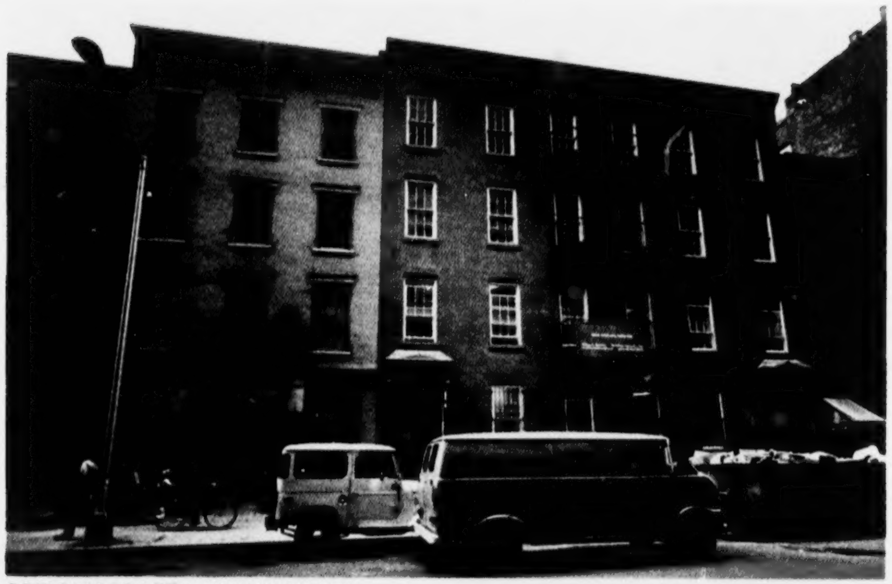




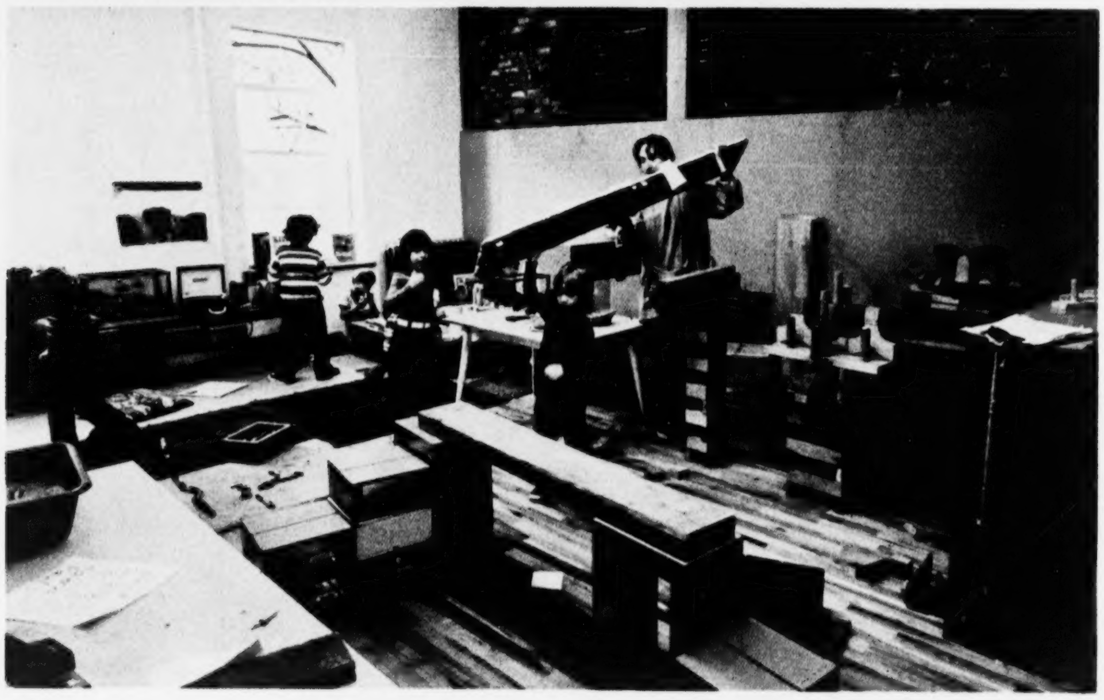
The ground floor wall between two new townhouses was removed to provide space for an all-day center for 3- to 5-year-olds. The upper levels are private residences.

residences

Adjoining houses on a city street were remodeled into a school for 115 children aged 3 to 8. Capacity will be enlarged for another 100 pupils through 8th grade.

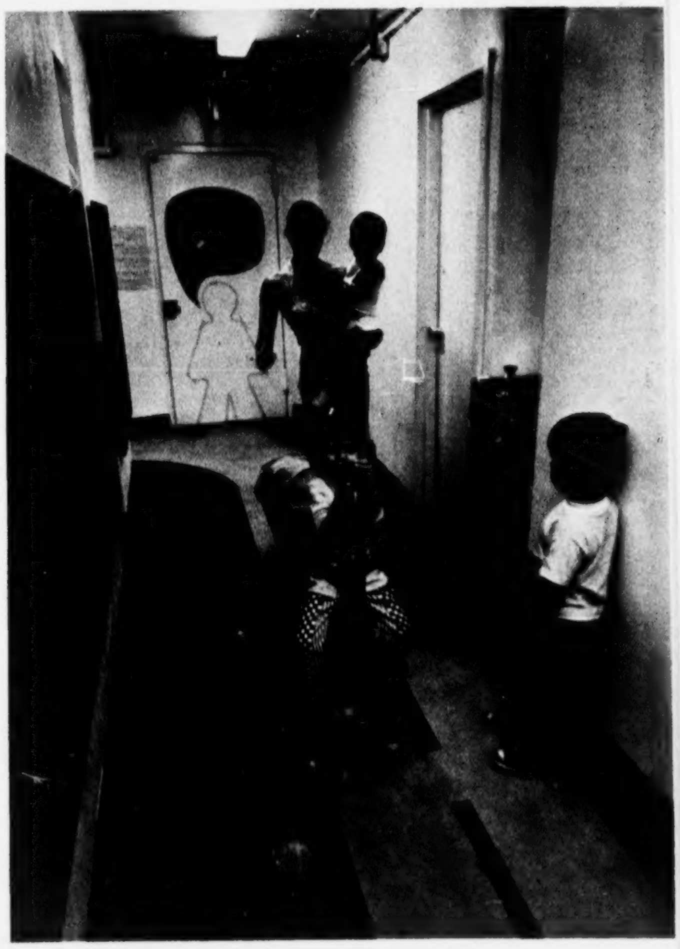


CORLEARS SCHOOL, NEW YORK CITY



apartment buildings

MANHATTAN VALLEY DAY CARE CENTER, NEW YORK CITY



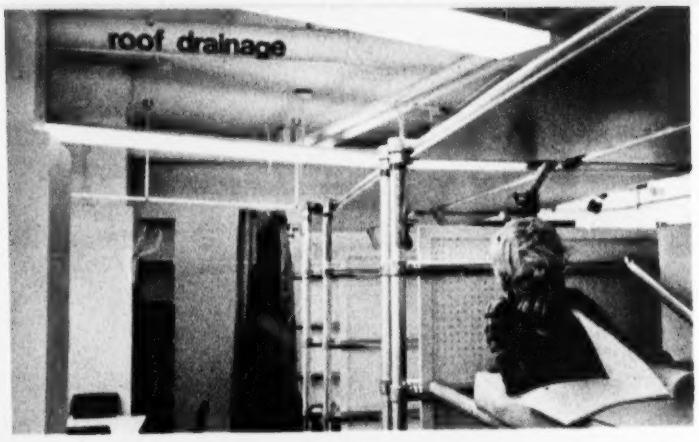
Basement storage rooms of a city apartment building were converted into a day care center for tenants' children. Floor tiles in corridor mark traffic lanes for wheeled toys.

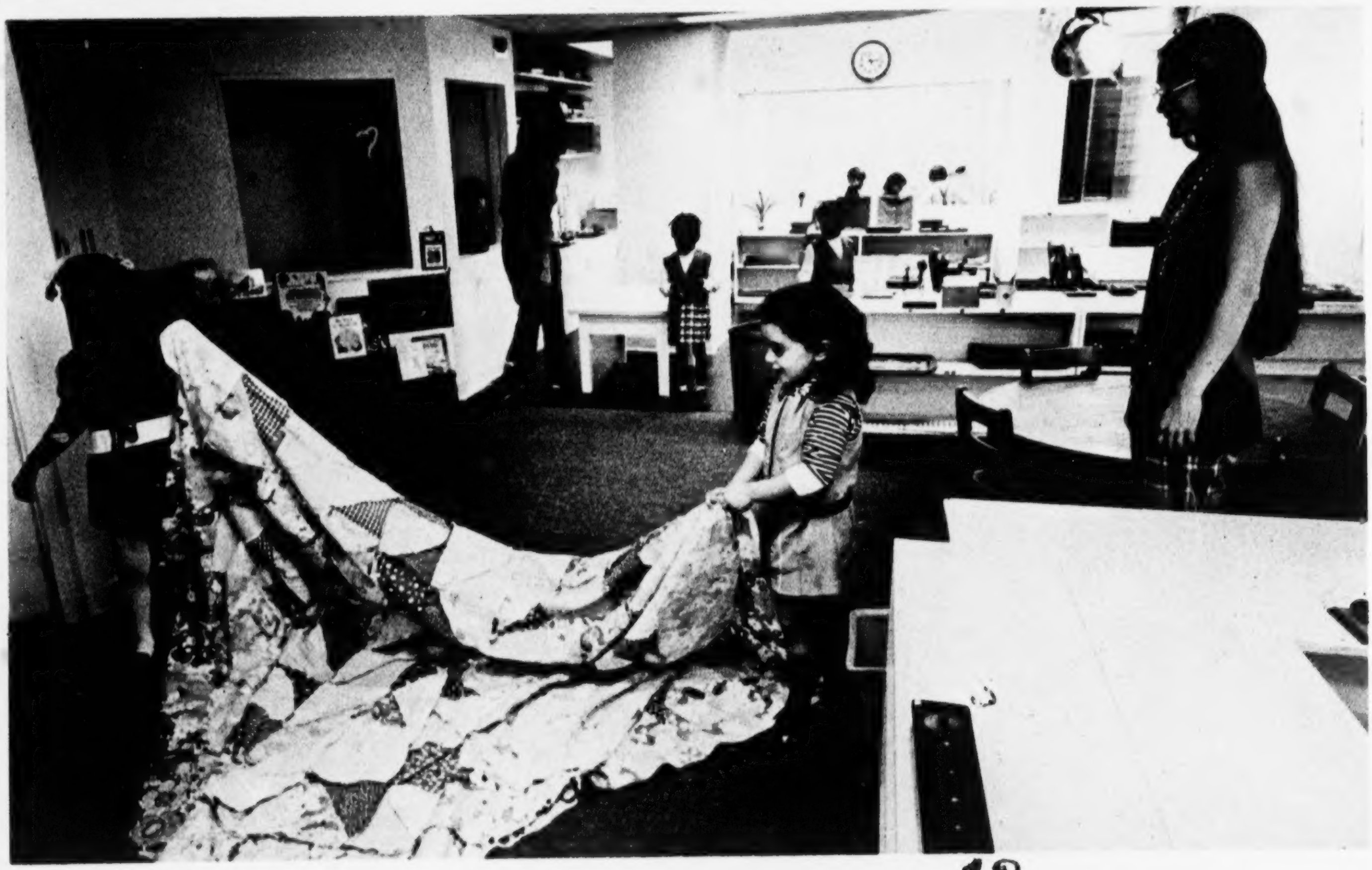
I. types of places

office buildings

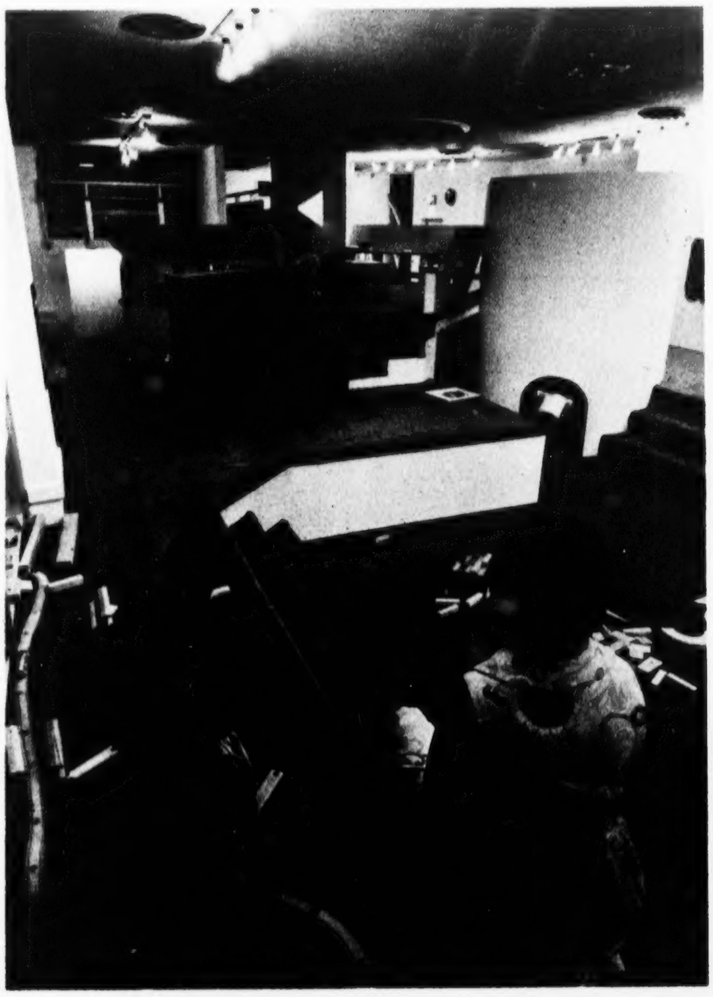
THE ACORN SCHOOL, NEW YORK CITY

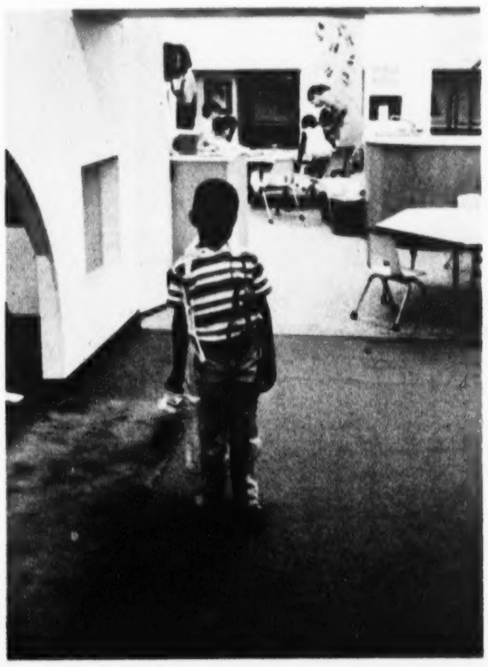
Space zoned for professional offices on the ground floor of a new high-rise apartment building was reallocated for a children's center and school. Some areas have acoustic ceilings, but where ducts or pipes were exposed, the designers labeled them so children would learn about building services. Plaza will be equipped for play.


roof drainage



I. types of places

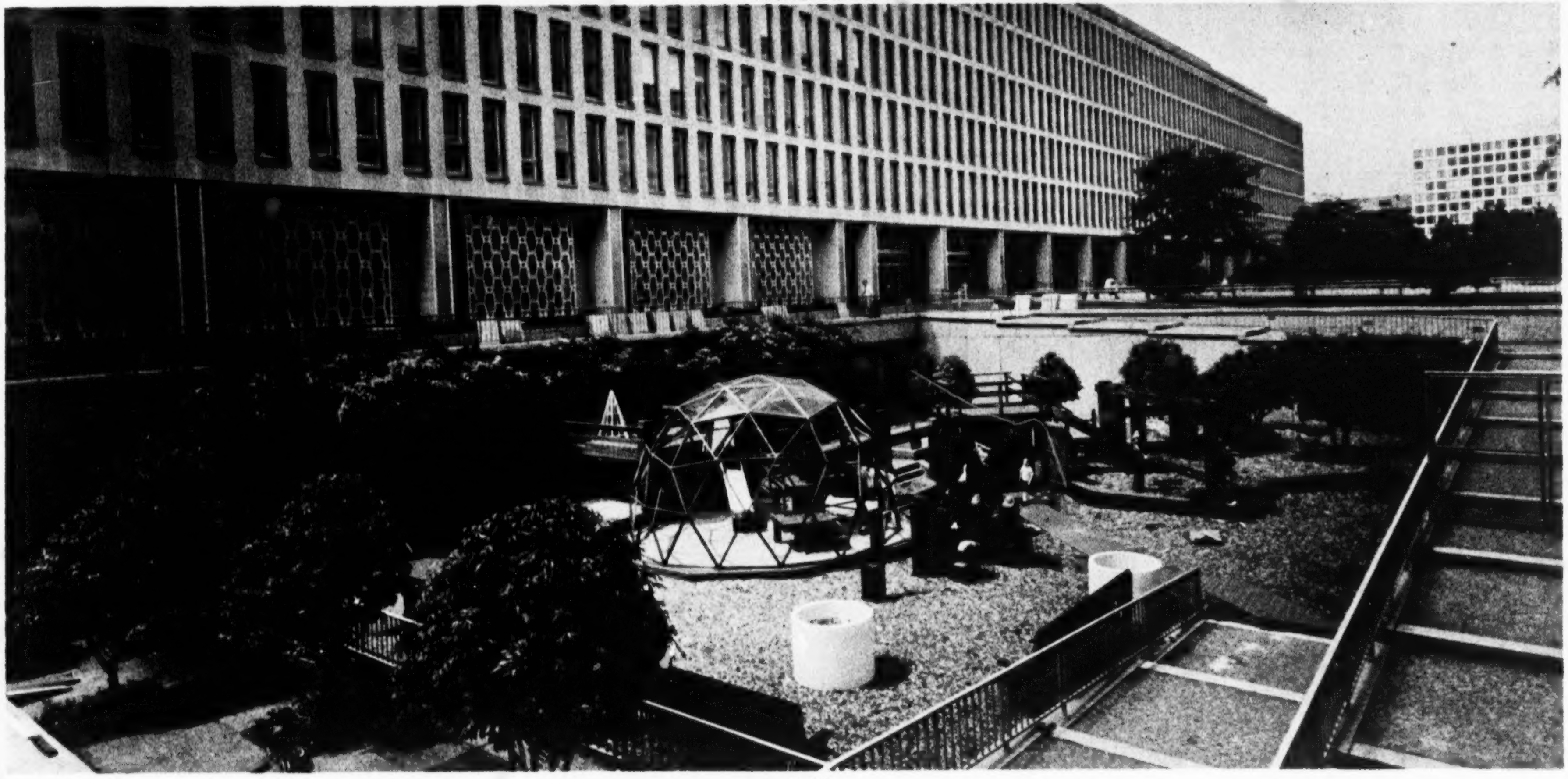




office buildings

Multilevel platforms and carpeting in an employees' day care center dispel the institutional atmosphere of a federal government building. This center also enjoys a large outdoor area with play equipment. (See Outdoor Spaces.)

NATIONAL DEMONSTRATION CENTER IN EARLY CHILDHOOD EDUCATION, WASHINGTON, D.C.



churches

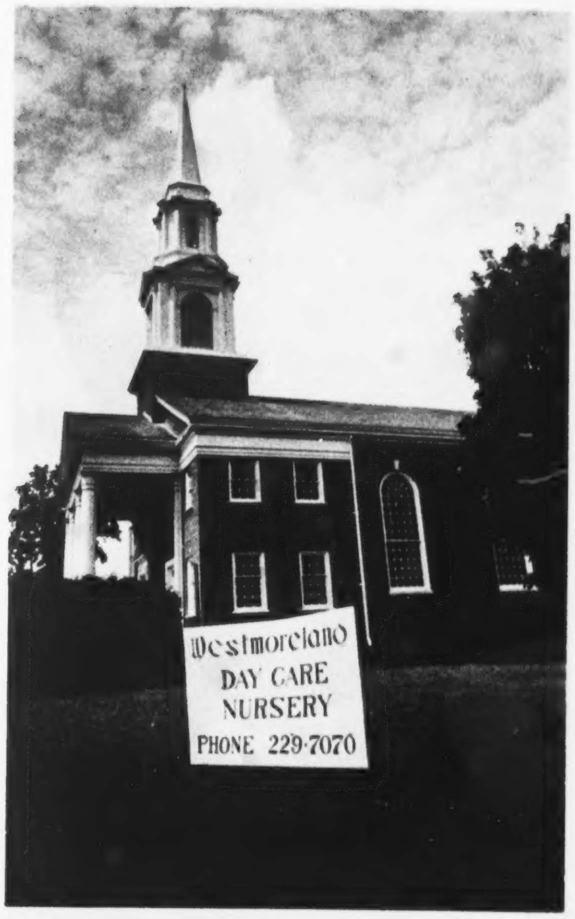
A carpeted church with high ceilings and stained glass windows provides a simple but effective center for a Head Start program. Inner city churches left empty when parishioners migrate to the suburbs often can be rented by nonprofit groups such as day care centers.

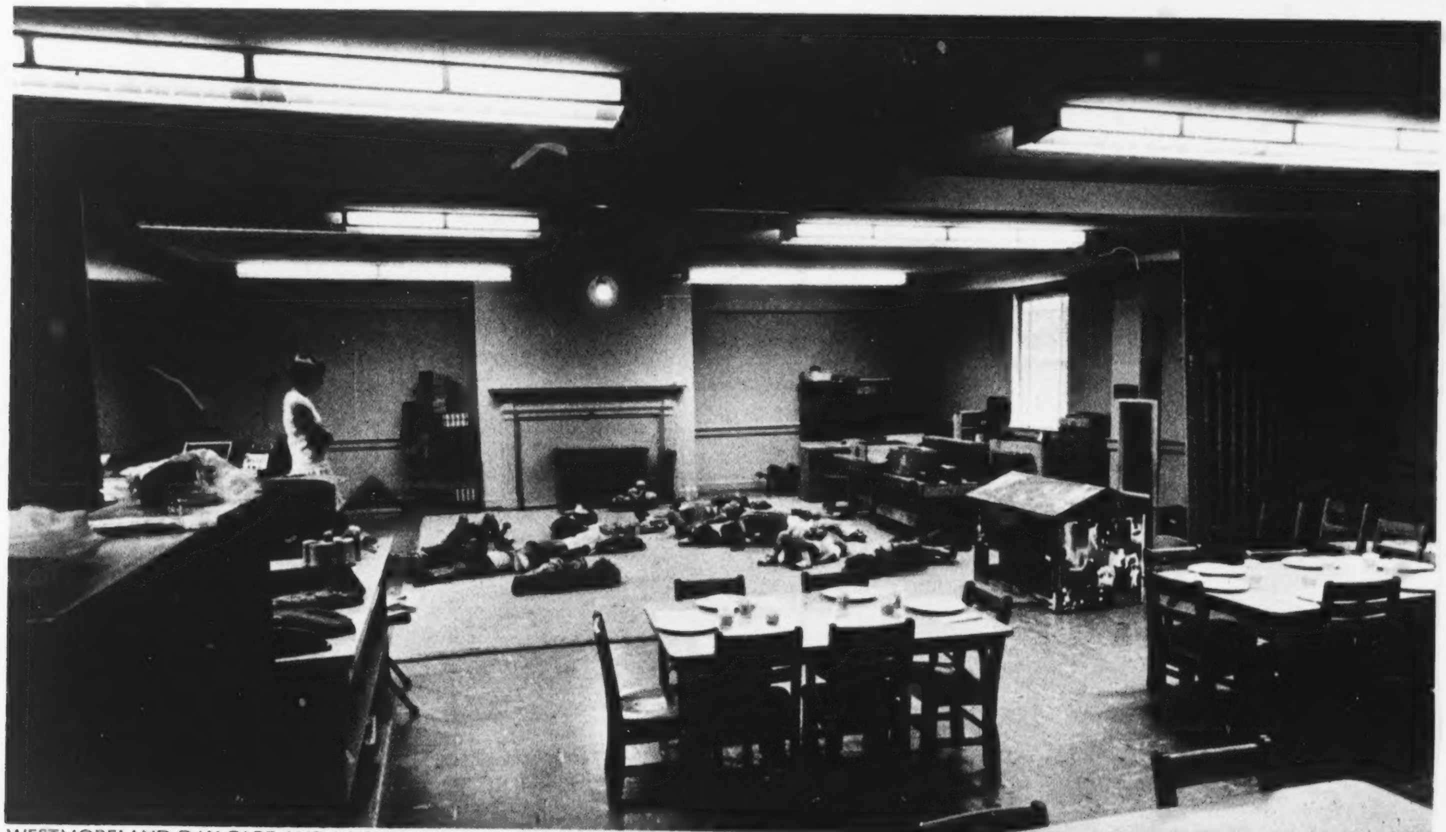
COLUMBIA ROAD PRESCHOOL, WASHINGTON, D.C.

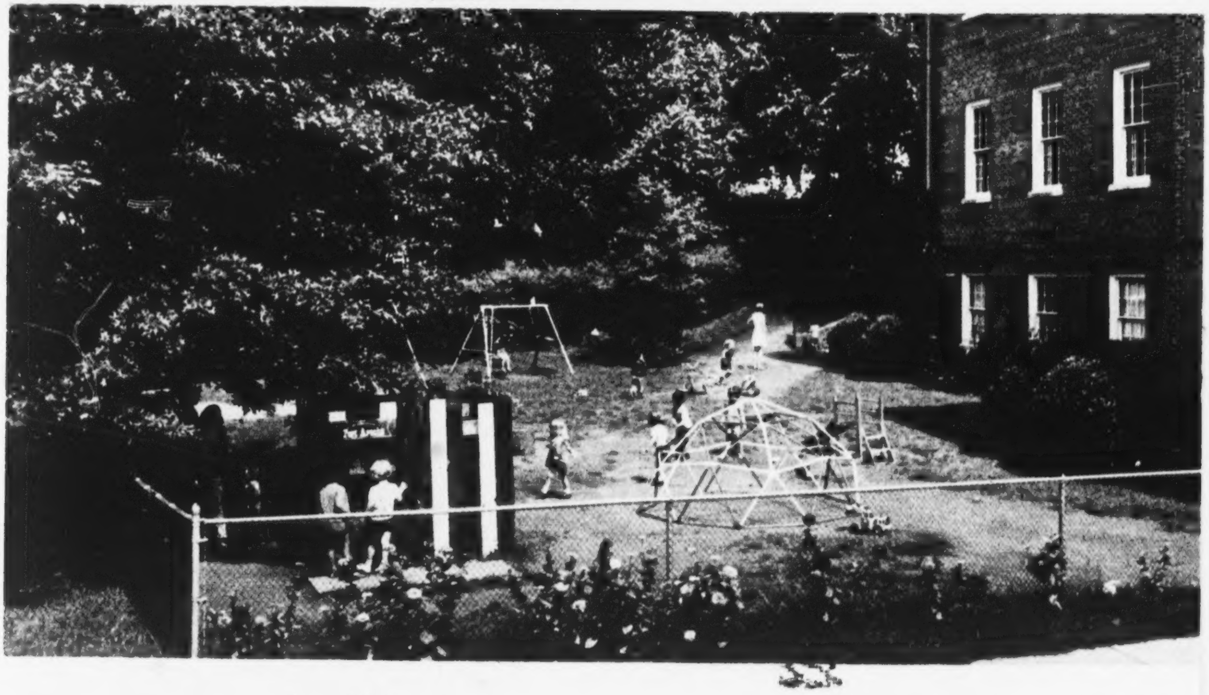
I.types of places

churches

Meeting rooms in a suburban church house 30 children in a non-sectarian nursery school and day care center. A drawback to this type of accommodation is that the rooms are shared with the Sunday school. Therefore, most equipment and materials must be put away for weekends. Also, the day care program has to use the existing heavy furniture that is not really functional for a preschool.

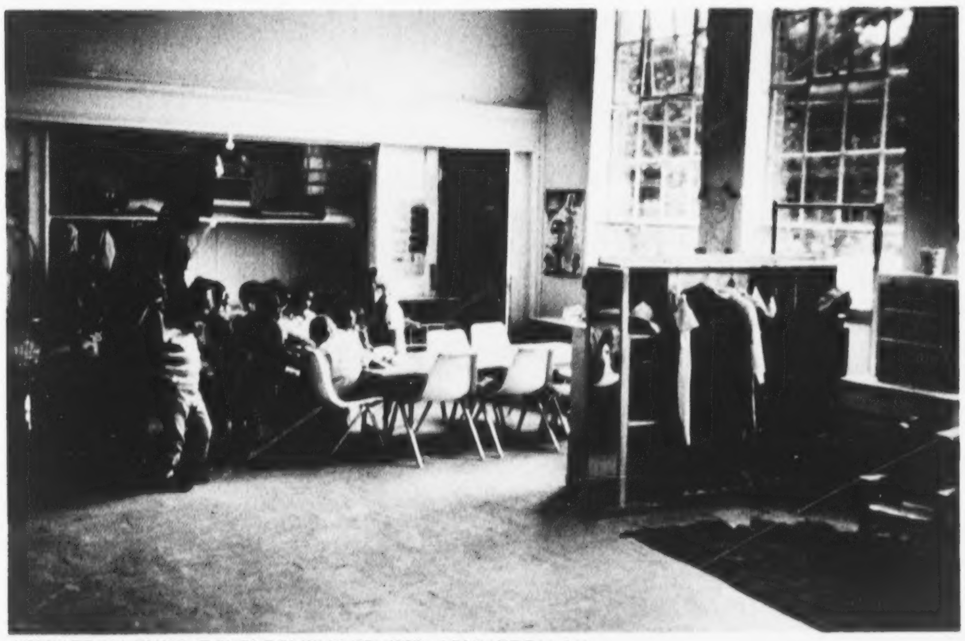



WESTMORELAND DAY CARE AND NURSERY SCHOOL, WASHINGTON, D.C.



old public schools

An empty public school is rented for $1.00 per year by a Head Start program. Parents' volunteer labor helped shape up the building for 135 children.



ARLINGTON CHILD DEVELOPMENT CENTER, ARLINGTON, VA.

farm buildings

BURGUNDY FARM COUNTRY DAY SCHOOL, ALEXANDRIA, VA.

Barns and farm buildings abound in country districts, but they usually require major alterations, such as additional exits, windows, heating, lighting, insulation, and interior finishes. Nevertheless, the benefits of a rural atmosphere and the presence of farmyard animals make these worthwhile investments.

2. furniture

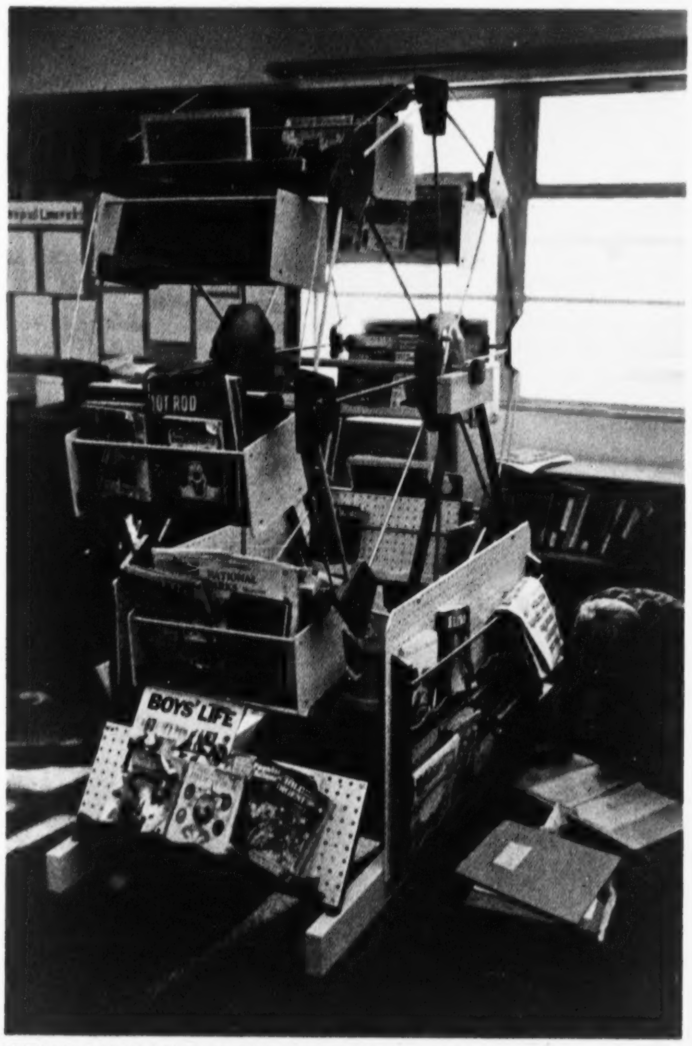
Because the people who run day care centers usually do not have funds to buy all the furniture and equipment they need, they have to find other ways to acquire it. Fortunately, there are a lot of things available. And just as fortunately, there is no longer any reason to feel that junk or reclaimed items are to be used only when you cannot afford "real" equipment. Young children have their own priorities which some adults may not share. Hence, the junk items seem far more valuable and exhilarating to children. The limitation of funds frequently becomes a challenge to the untapped inventiveness of teachers and designers. With unconcealed pride, they vie for the most imaginative use of objects of "no commercial value." A casual but selective search will uncover materials and objects discarded by the manufacturing and distributing processes of our consumer-oriented lifestyle. From carpet rolls to packing crates, there are "takers" who fashion them into gymnastic mazes or complicated assemblies. In addition to the low or zero cost, these projects have an educational side benefit for the parents and children who become involved in the creative process. Many of these "constructions" are more creative, exciting, and educationally valuable than their catalogue complements—if indeed they have any. A suggested list of low or no-cost items is included in the appendix. The list is partial, because there is no possible inventory for human imagination, and combinations of several objects allow seemingly limitless inventions. Pictured here are many obvious (though some are unique) and exciting ways to recycle discarded objects into useful elements for furnishing and equipping childhood centers.

and equipment

furniture that teaches
containers
furniture that goes away
for privacy and learning together
places for resting
jumping, crawling and climbing
things for sitting

2. furniture and equipment

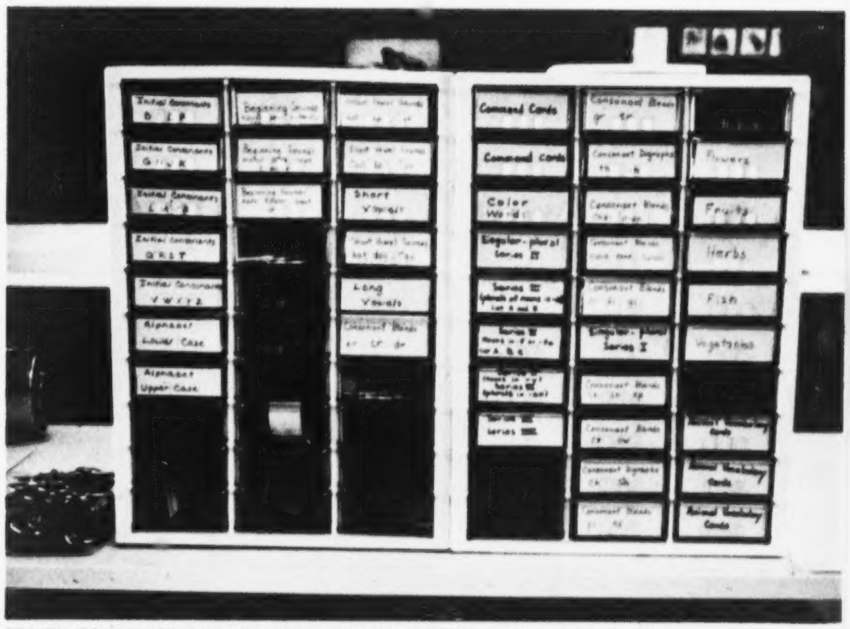
Homemade ferris wheel organizes
and displays learning materials.



CHERRY CREEK SCHOOL DISTRICT, DENVER, COLO.

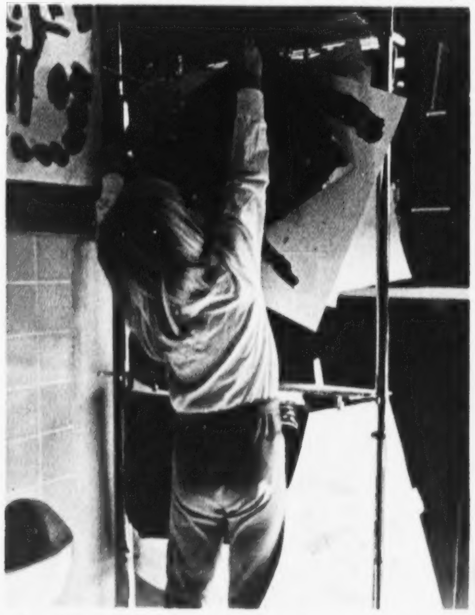
furniture that teaches

Plastic "shoebox" library
organizes instructional objects.



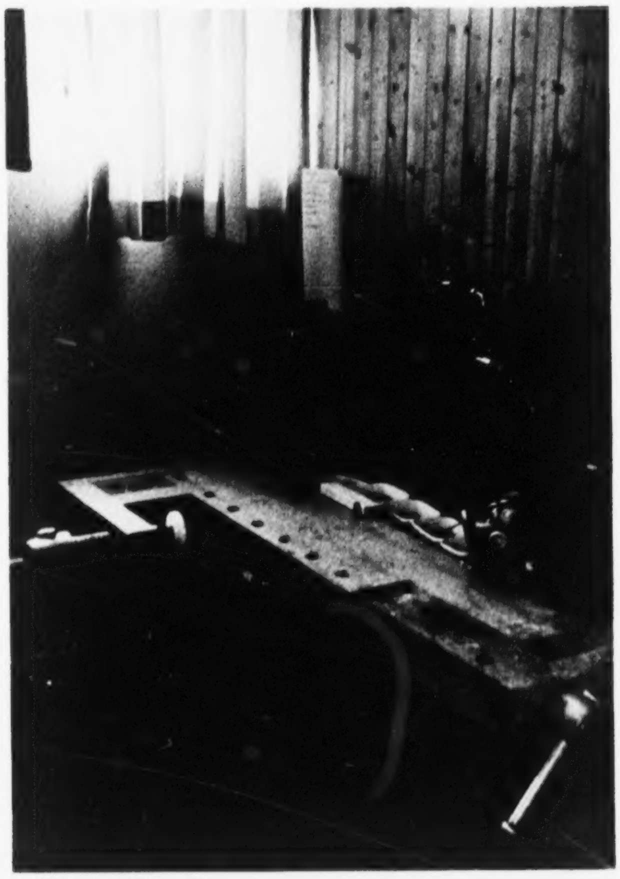
SEA PINES MONTESSORI SCHOOL, HILTON HEAD ISLAND, S.C. ▲ ▼

HAROLD E. JONES EARLY EDUCATION CENTER, BERKELEY, CALIF.



Clotheslines, clothespins
and bathroom racks for
display when walls
cannot be used.

A carpenter's workbench with shortened legs that tells children: "We have confidence in your ability."



SWEDISH PRESCHOOL

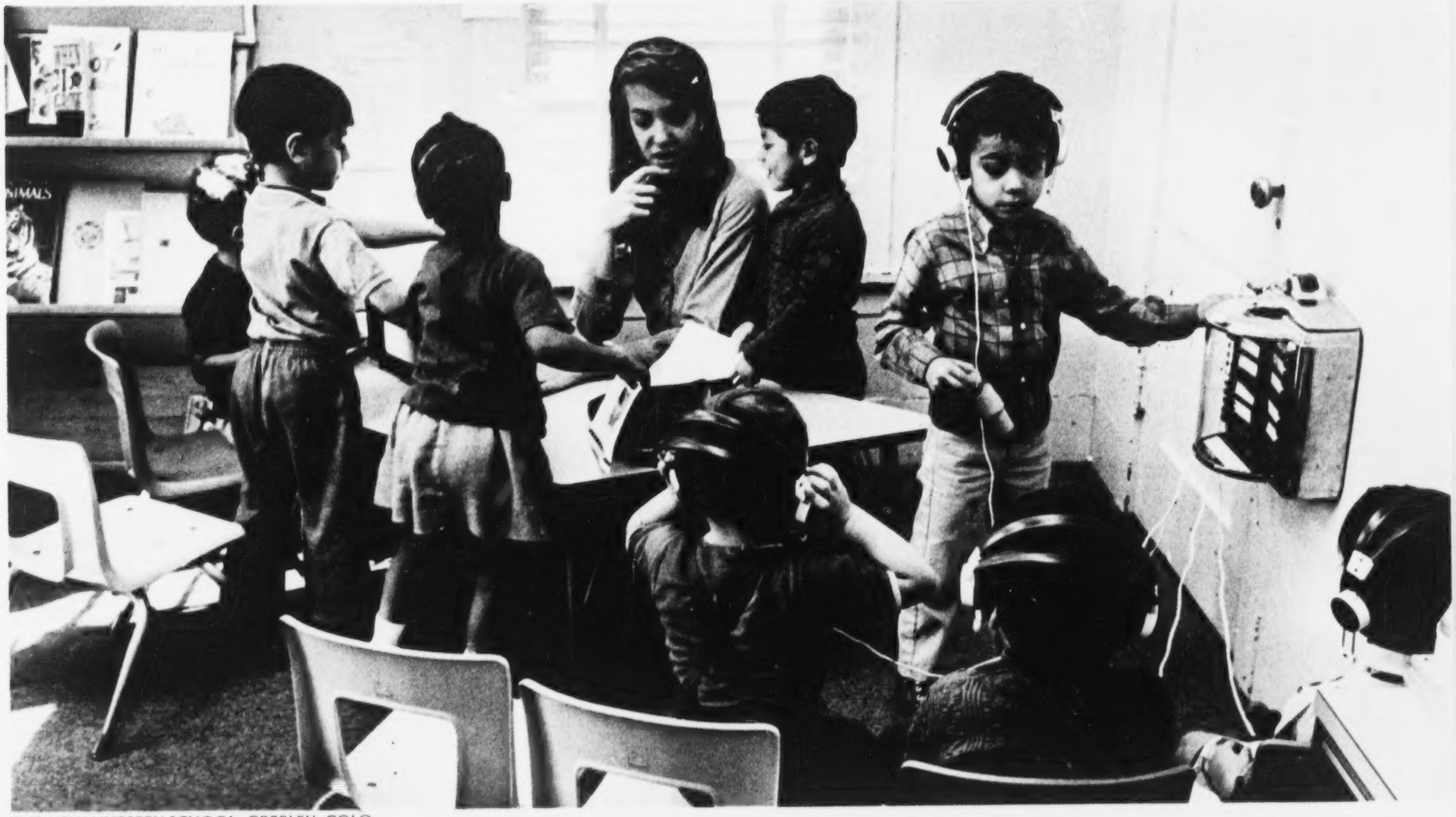
SWEDISH PRESCHOOL

Fireplaces add a homelike quality—they must be screened for safety.

THE PUTNAM SCHOOL, GREENWICH, CONN.

Mirror with lightbulbs enlivens the "dress-up" area.

Old jukebox selector wired for children to make individual choices.



THE NEW NURSERY SCHOOL, GREELEY, COLO.

2. furniture and equipment

THE ACORN SCHOOL, NEW YORK CITY

Waxed paper cups
for planting
(cut-down
milk cartons or
coffee cans
also work).

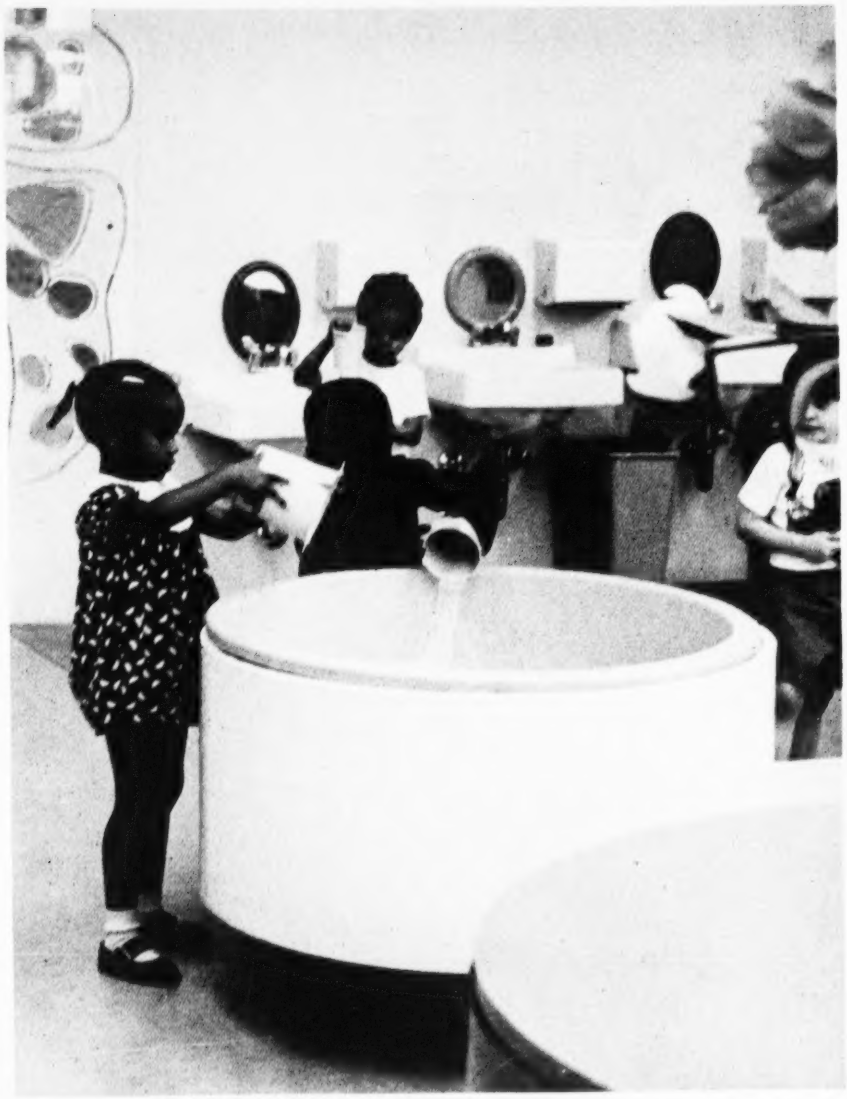
furniture that teaches

Plastic wastebaskets
for anything you
can think of.

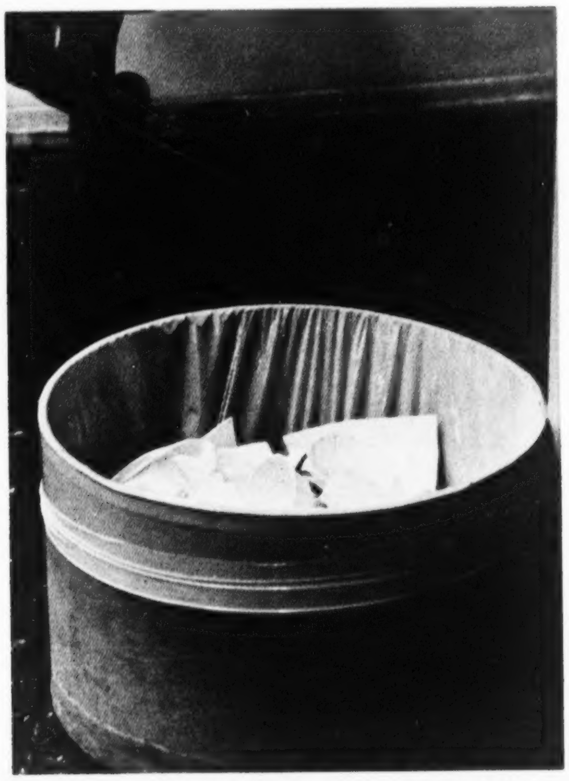
NATIONAL CHILD RESEARCH CENTER, WASHINGTON, D.C. ▲

Wire mesh and lumber
for an animal shelter.

Fiberglass fish ponds
(or plastic wading pools)
set in plywood drums
or cardboard ice cream
containers can be
used for a variety
of purposes.

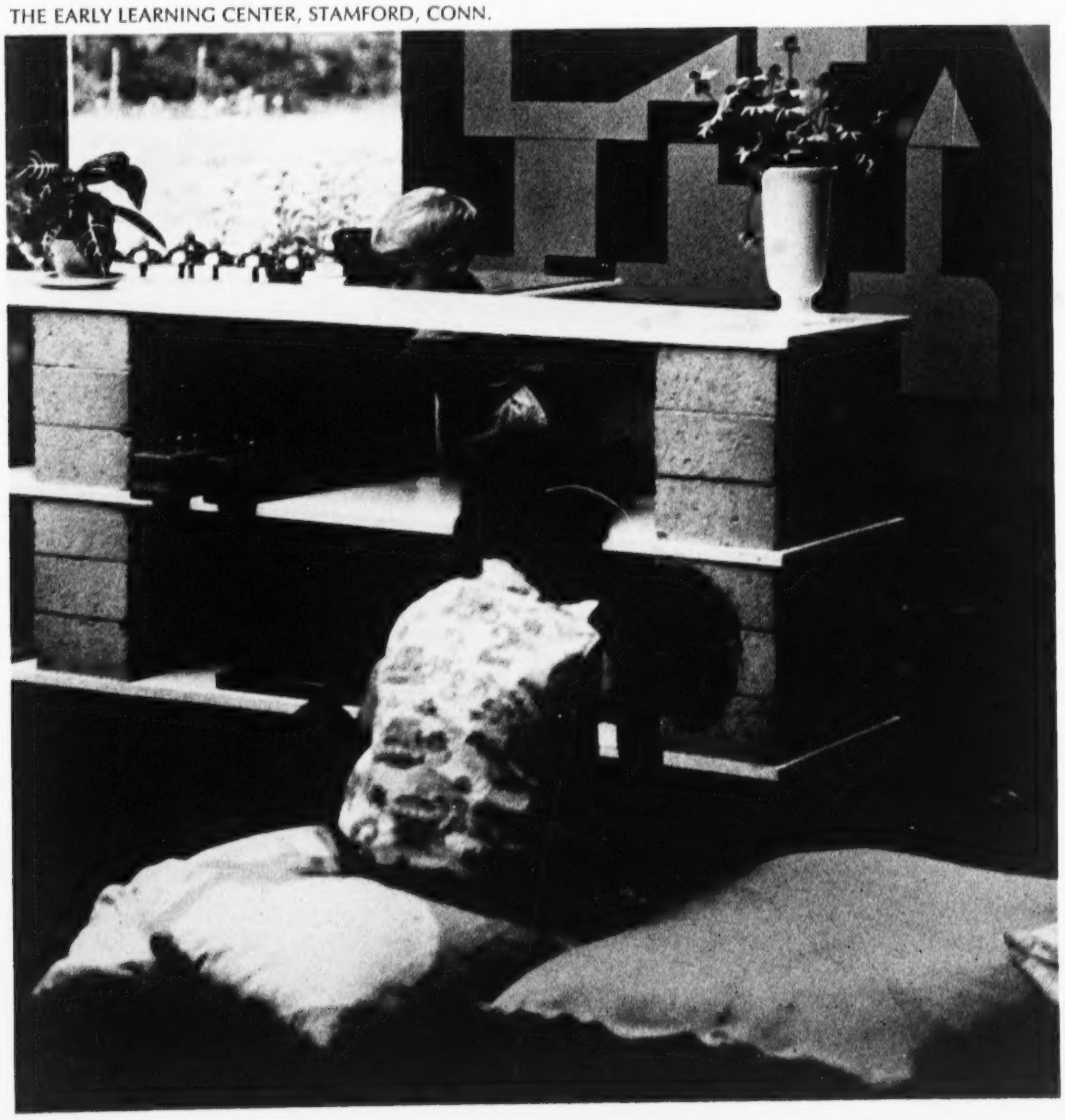


C.L.C. GOOD HOPE ROAD CENTER, WASHINGTON, D.C.

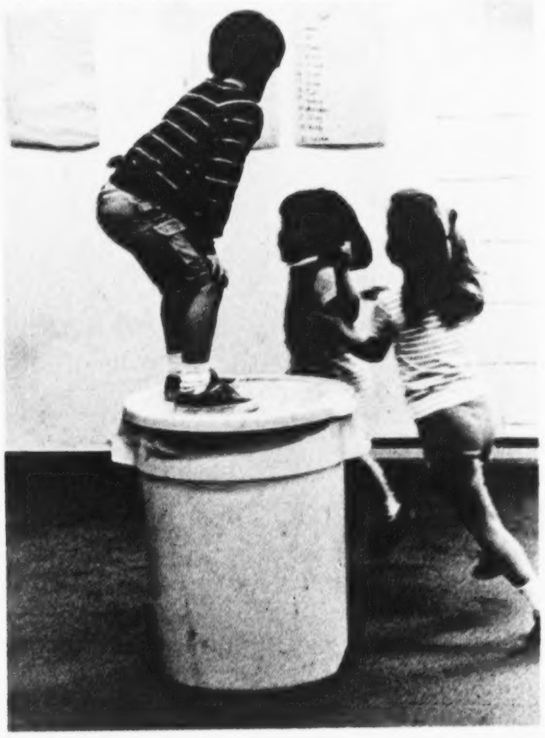


MANHATTAN VALLEY DAY CARE CENTER, NEW YORK CITY

THE EARLY LEARNING CENTER, STAMFORD, CONN.



WOODMONT CENTER, NASHVILLE, TENN.



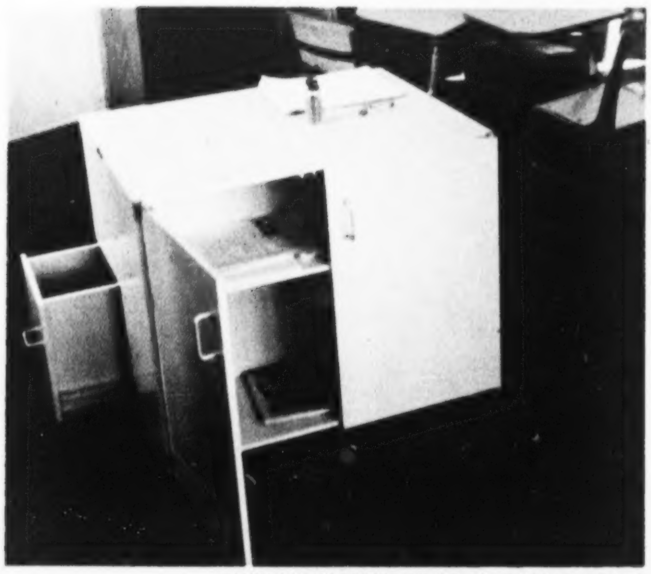
Plastic garbage pail
and liner makes a good
container for clay.

Wood planks and solid concrete
blocks for storage and display of
games and learning devices.

2. furniture and equipment

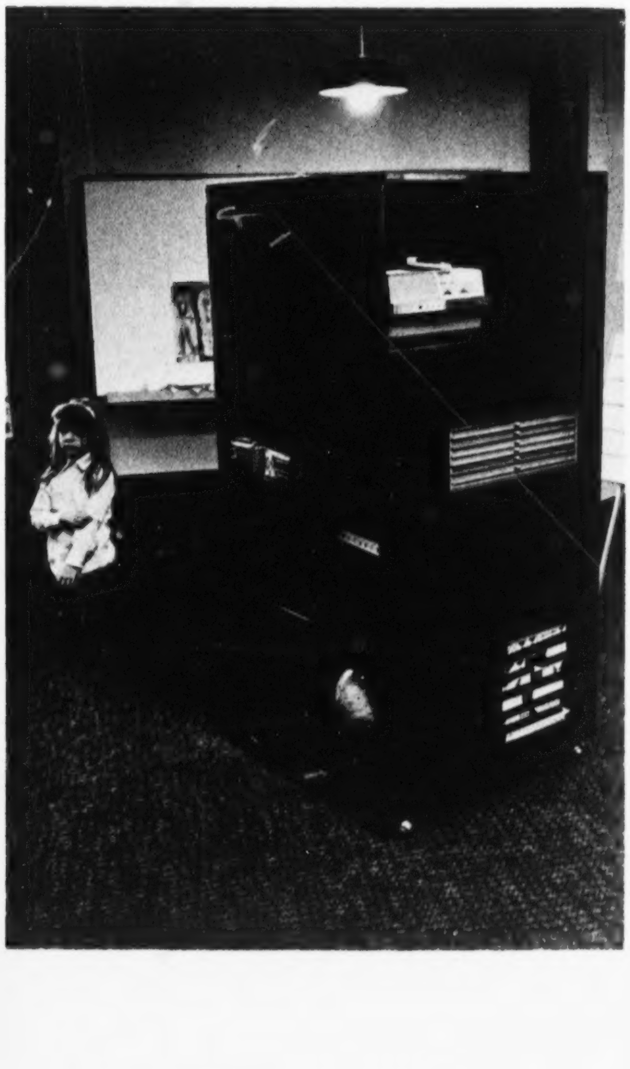
furniture that goes away

Materials, cabinets and work station on casters.

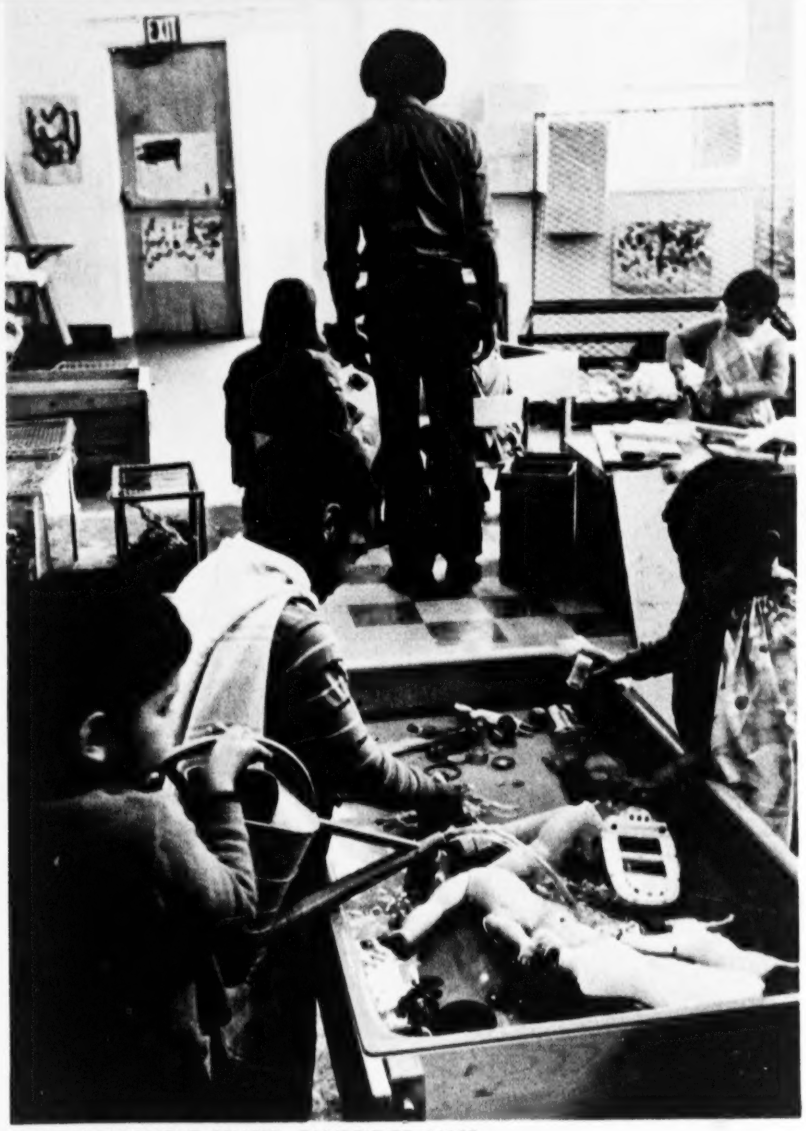


THE LAMPLIGHTER SCHOOL, DALLAS, TEXAS

Plywood cupboards, shelves or drawers can be built on casters where furniture has to be moved.



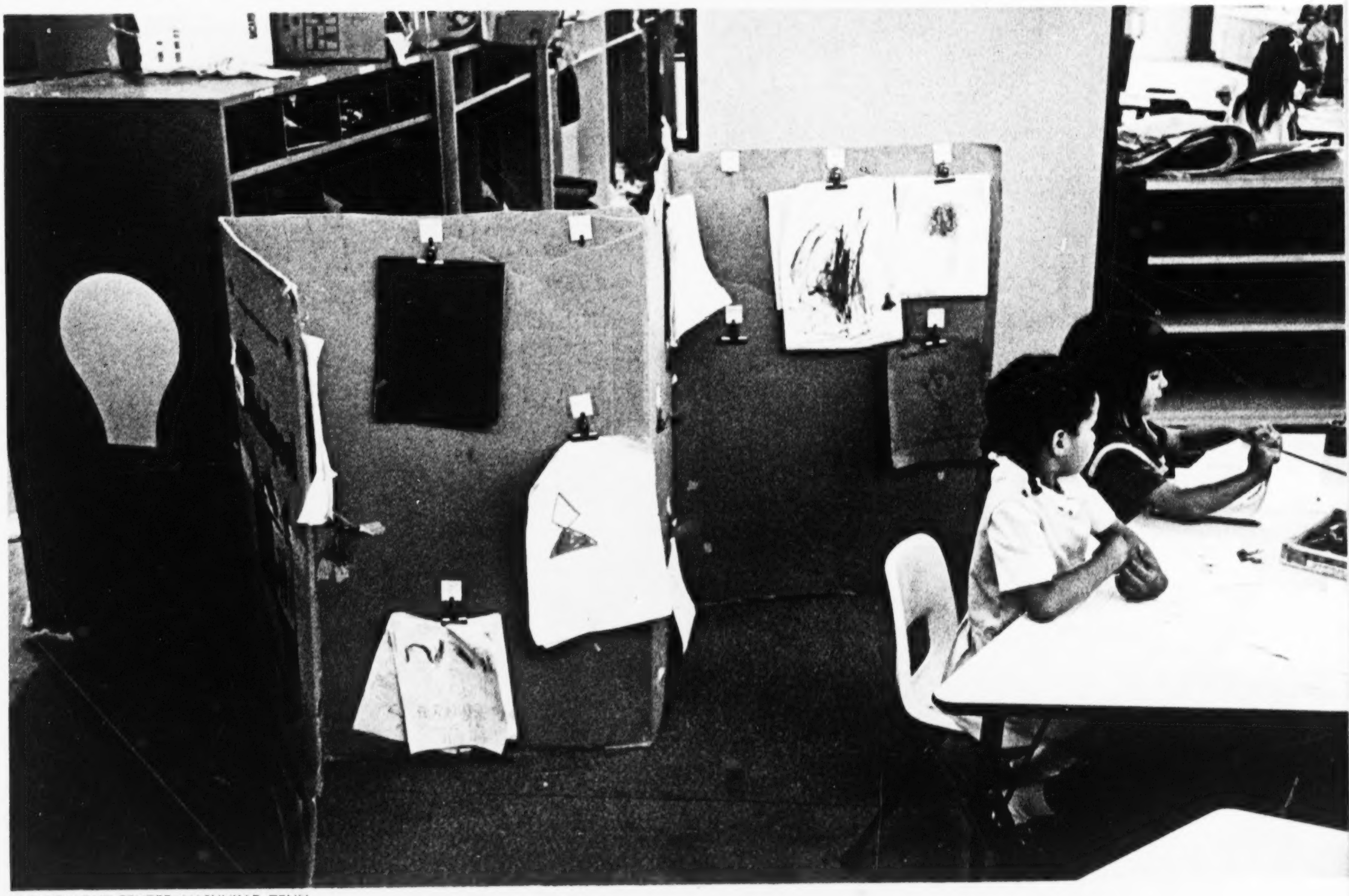
Rolling bookcase can be closed and moved away. When set up, it serves as a space divider.



A large plastic tub set into a wooden frame on casters can be used for paint, sand or water play.

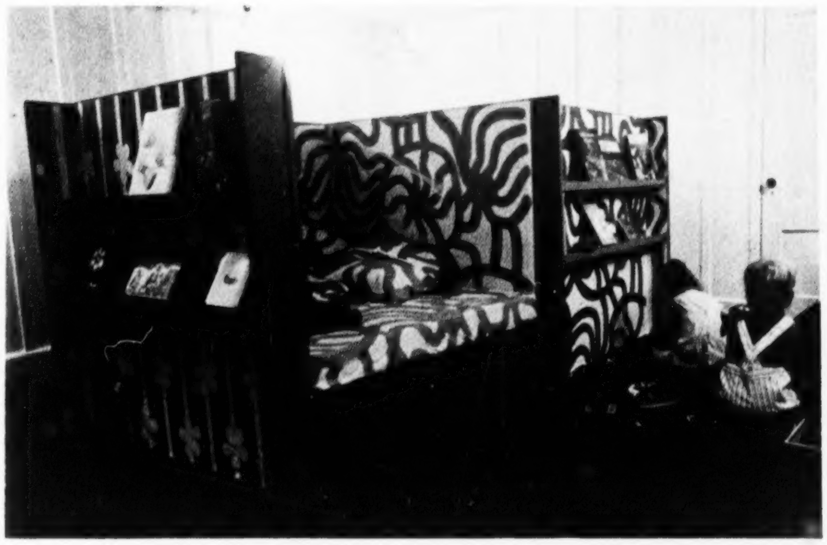
KLH DEVELOPMENT CENTER, CAMBRIDGE, MASS.

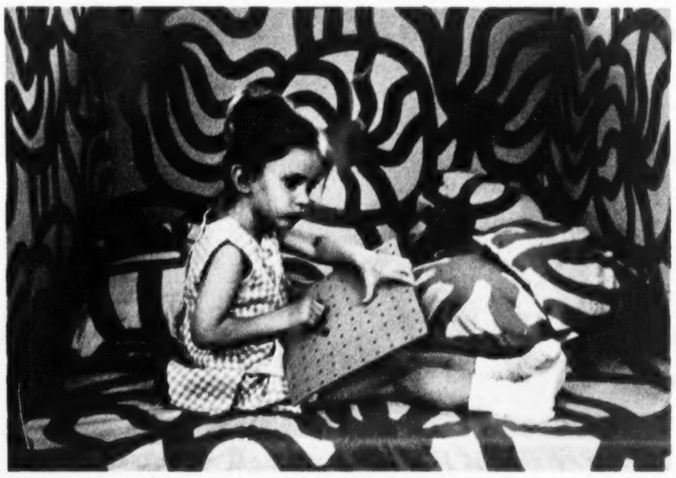
Large cardboard cartons make fine display screens.



WOODMONT CENTER, NASHVILLE, TENN.

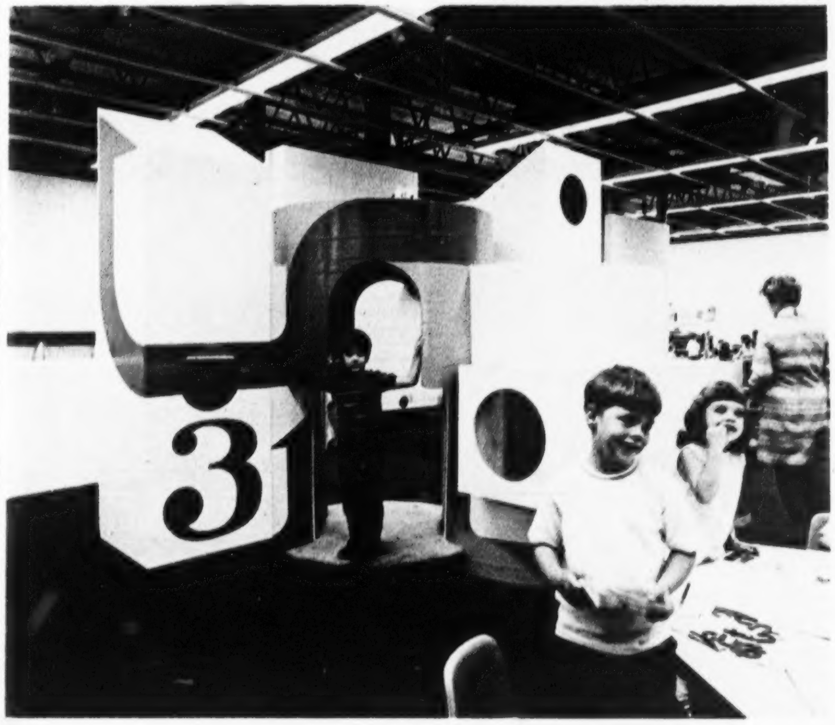
2. furniture and equipment





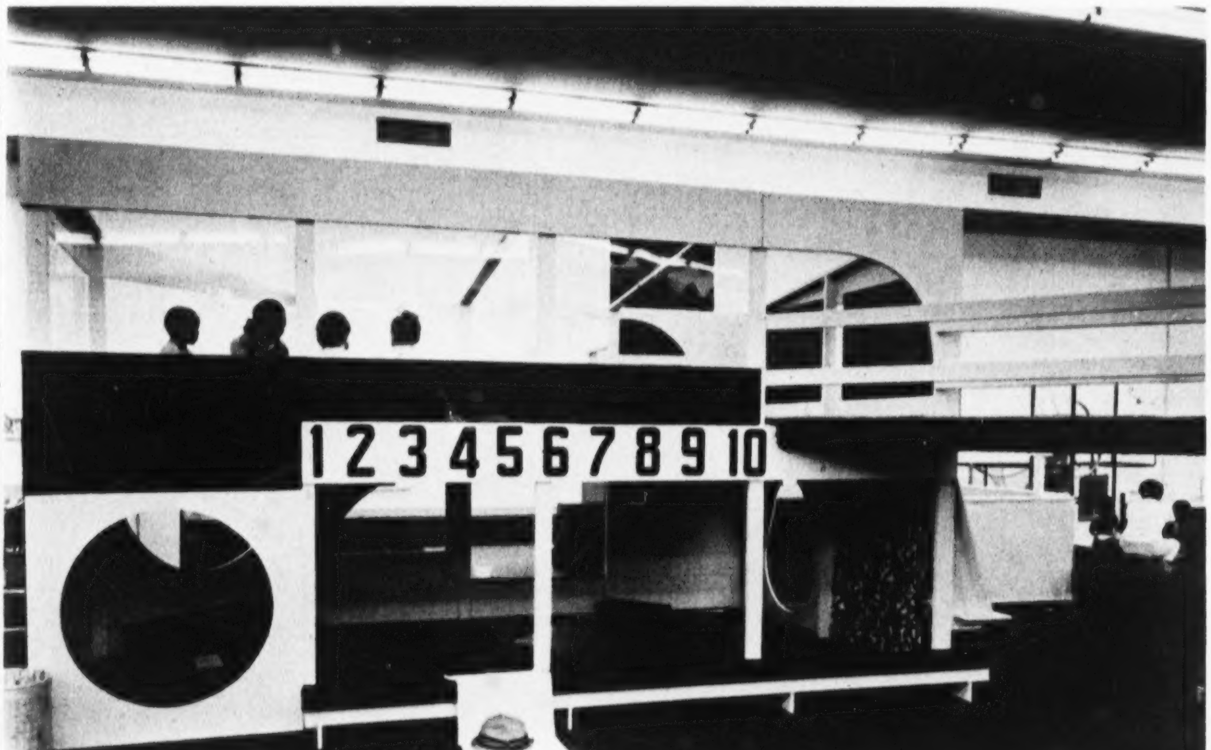
THE PUTNAM SCHOOL, GREENWICH, CONN.

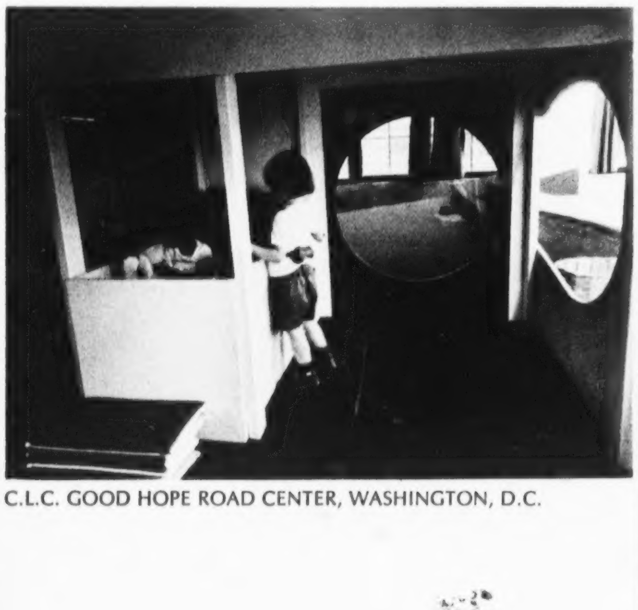
CASADY SCHOOL, OKLAHOMA CITY



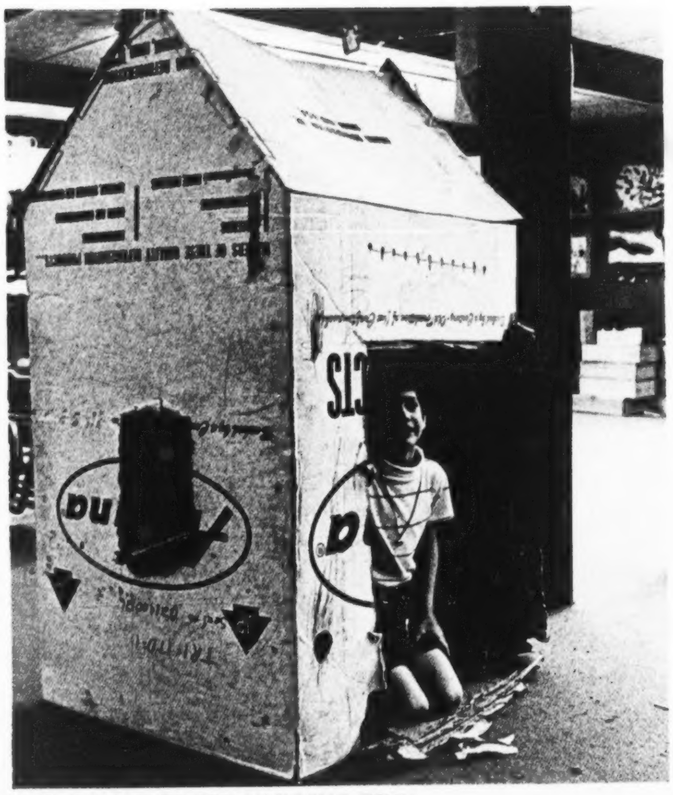
for privacy and learning together

"Little spaces within big spaces"—
for individual or group privacy.
Multi-level constructions and pits
can be built from lumber, cardboard,
foam padding, colored plastic,
carpet and paint.

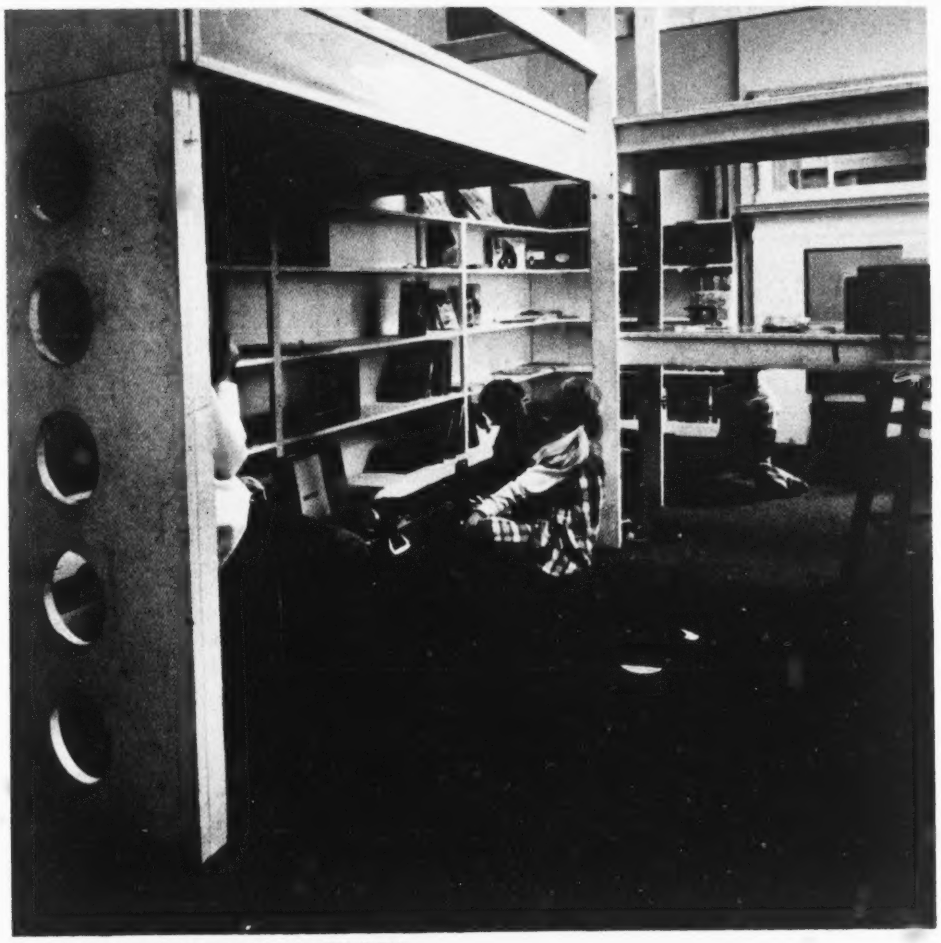




C.L.C. GOOD HOPE ROAD CENTER, WASHINGTON, D.C.

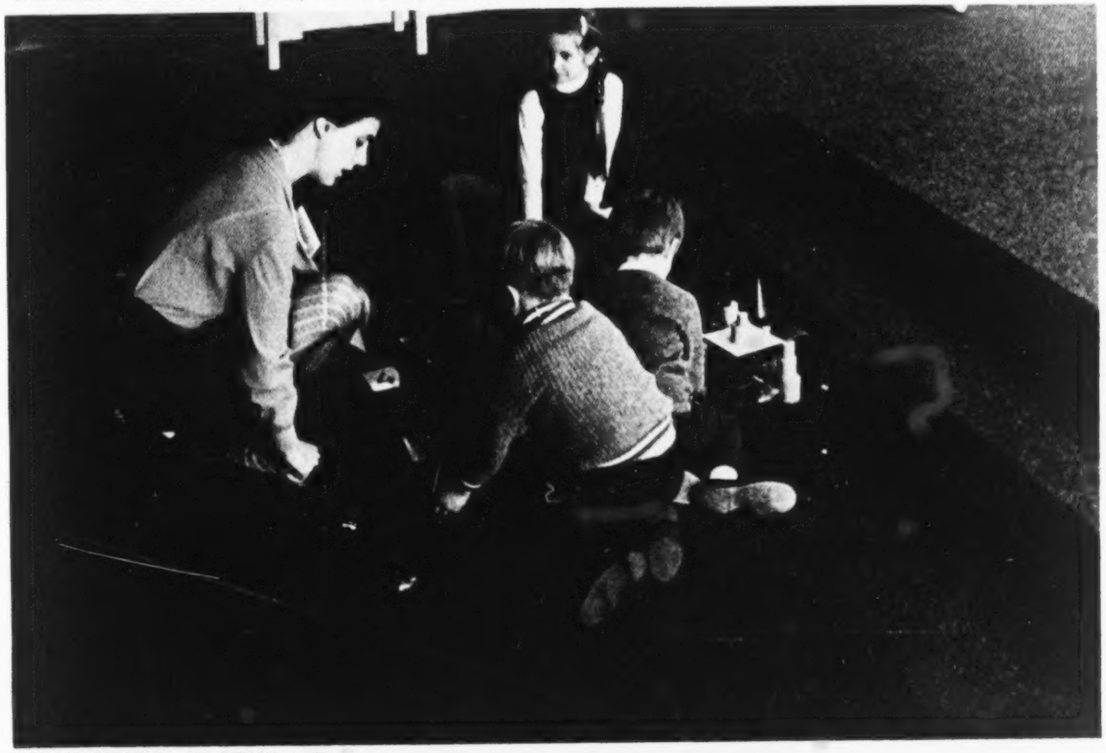


WOODMONT CENTER, NASHVILLE, TENN.



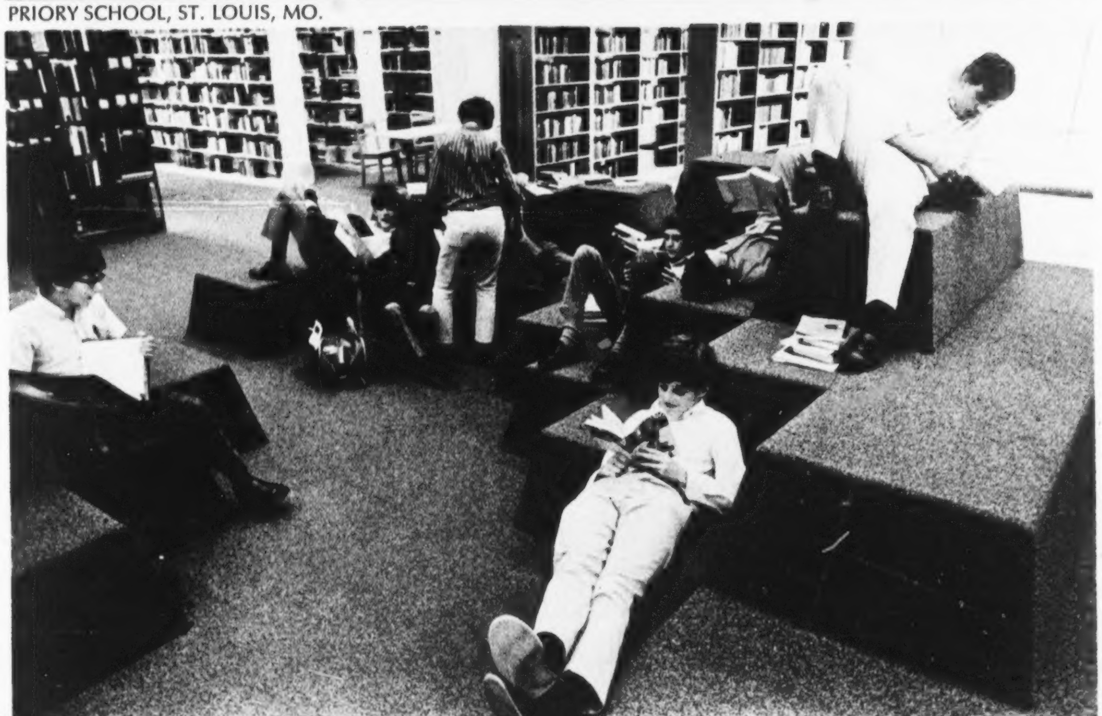
THE SHADY LANE SCHOOL, PITTSBURGH

THE EARLY LEARNING CENTER, STAMFORD, CONN.



Same effect can be achieved by "building up" with carpet-covered boxes.

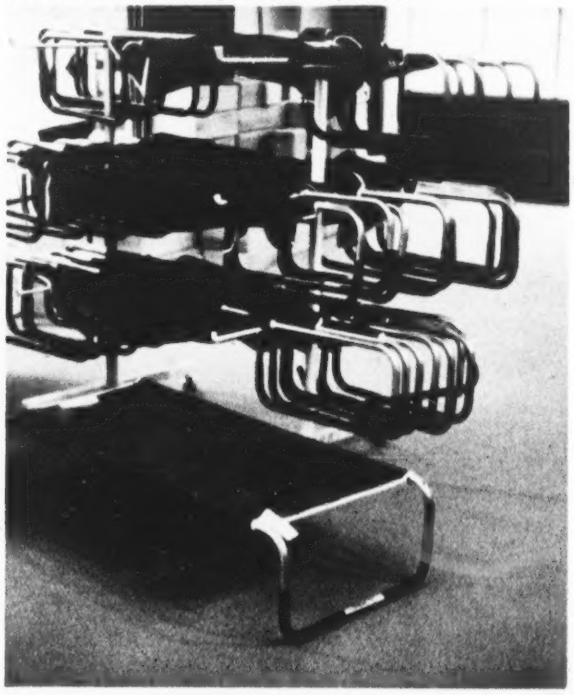
PRIORY SCHOOL, ST. LOUIS, MO.



2. furniture and equipment

places for resting

WOODMONT CENTER, NASHVILLE, TENN.



Cots store on movable racks.

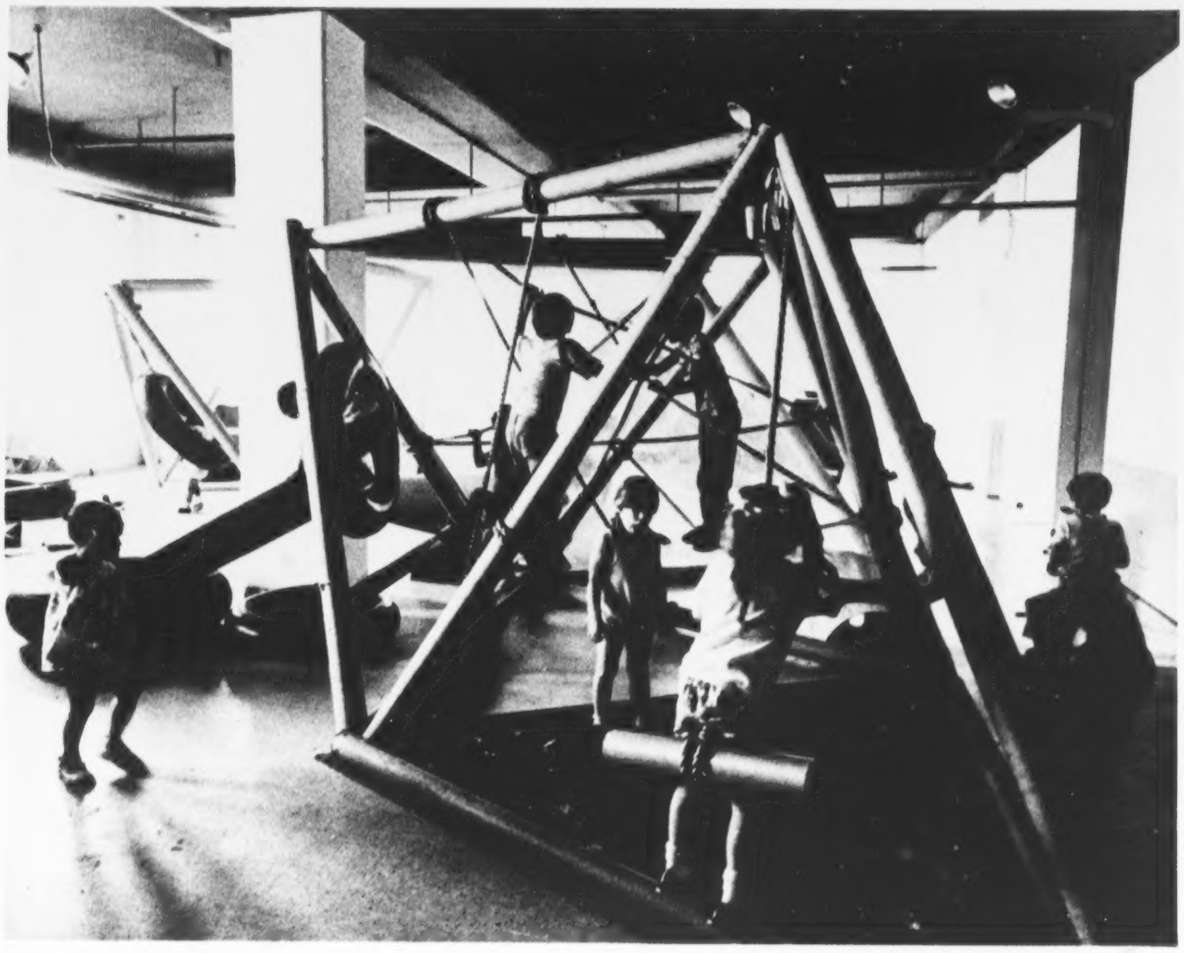
NATIONAL DEMONSTRATION CENTER
IN EARLY CHILDHOOD EDUCATION, WASHINGTON, D.C.

MANHATTAN VALLEY DAY CARE CENTER, NEW YORK CITY

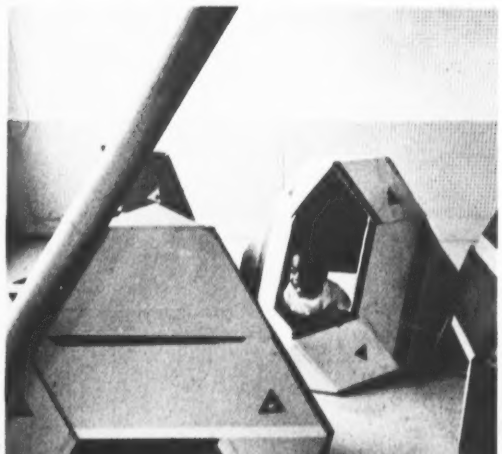
Activity space can become rest space by bringing in mats or blankets from home.

jumping, crawling and climbing

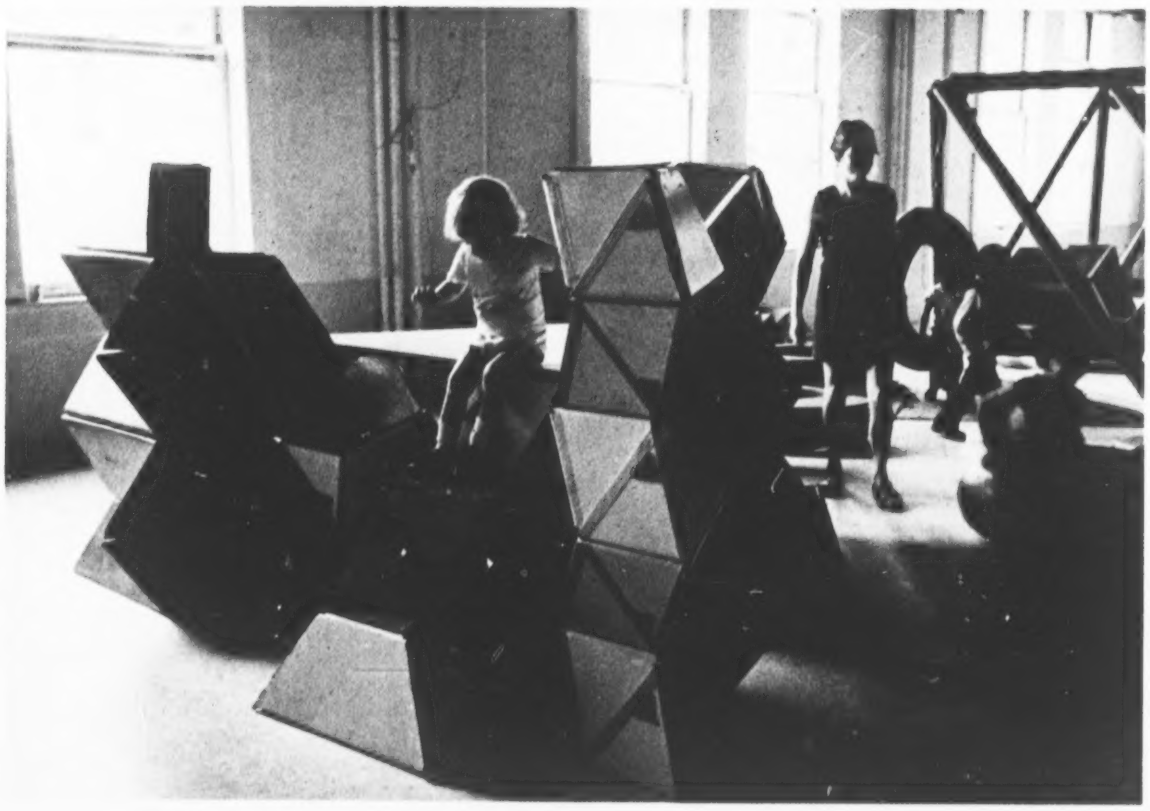
ARTHUR GOLDBERG CENTER



Self-supporting structure made from 8-ft lengths of cardboard tubes (used for transporting carpet) tied with rope.



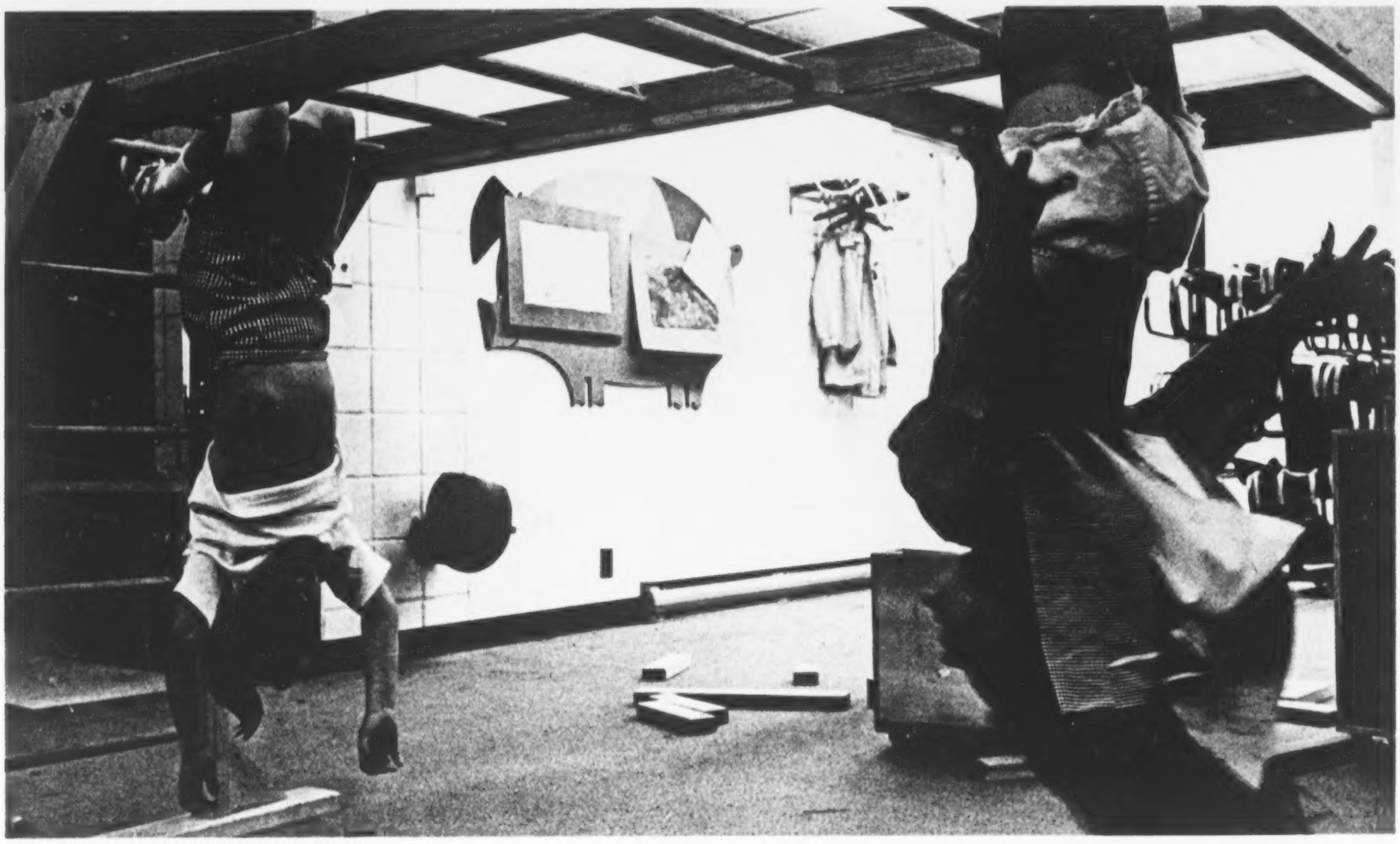
Many-sided reinforced cardboard units can be fastened together and stacked or used individually.



2. furniture and equipment

jumping, crawling and climbing

Climbing equipment shown can be duplicated by ladders suitably braced.

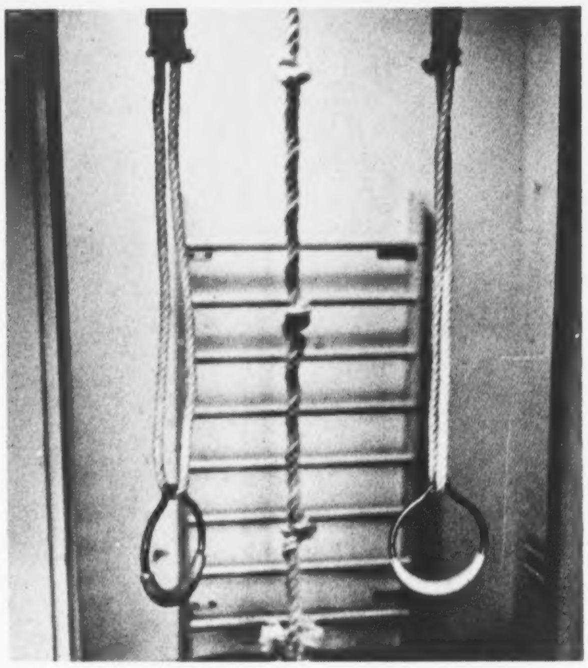


WOODMONT CENTER, NASHVILLE, TENN.

THE PUTNAM SCHOOL, GREENWICH, CONN. ▲ ▼

Fiber drums are fun to crawl through or climb on.

Swinging ropes
with metal rings
can be hung from
door frames.

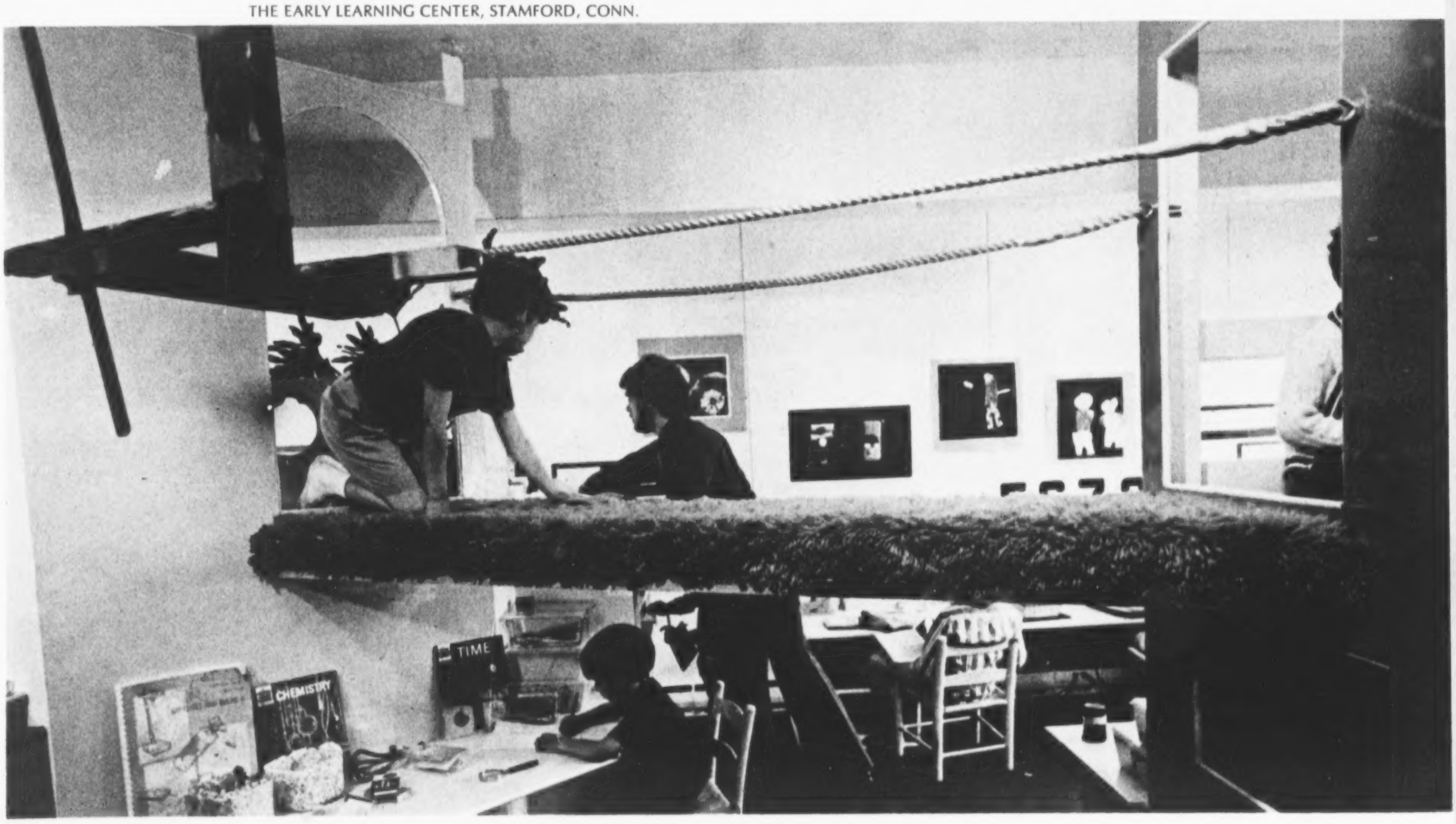


SWEDISH PRESCHOOL

Any floor can become an indoor skating rink with artificial "ice" made of plastic sheets that may soon be available at a modest price.

GLEN COVE ELEMENTARY SCHOOL, N.Y.

THE EARLY LEARNING CENTER, STAMFORD, CONN.



Carpet-covered lumber and rope handrail create a child-size bridge.

2. furniture and equipment

things for sitting

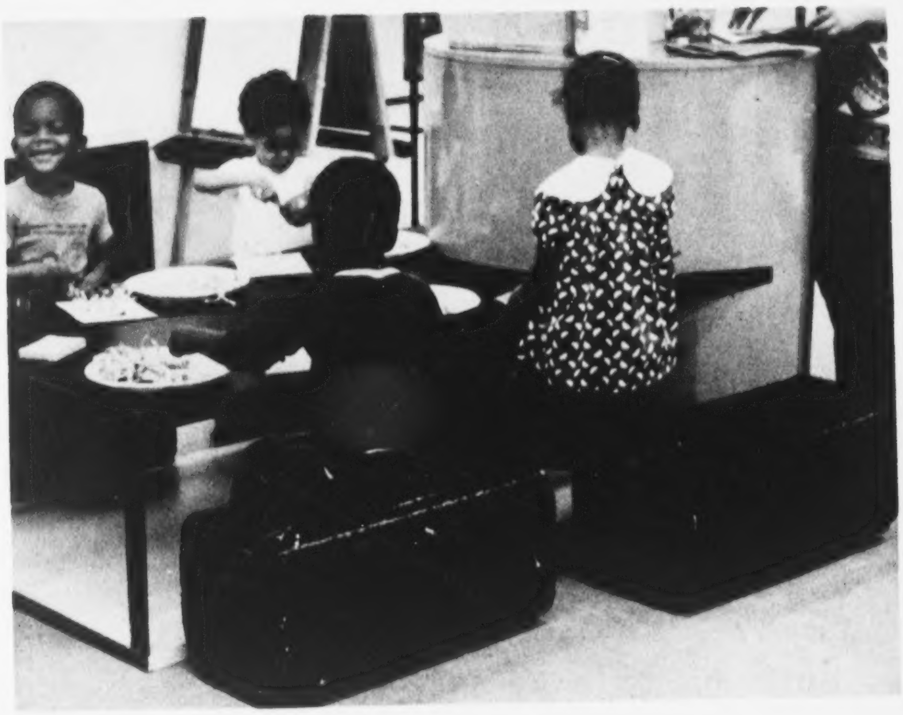
Inflatable cushions.

Lumber.

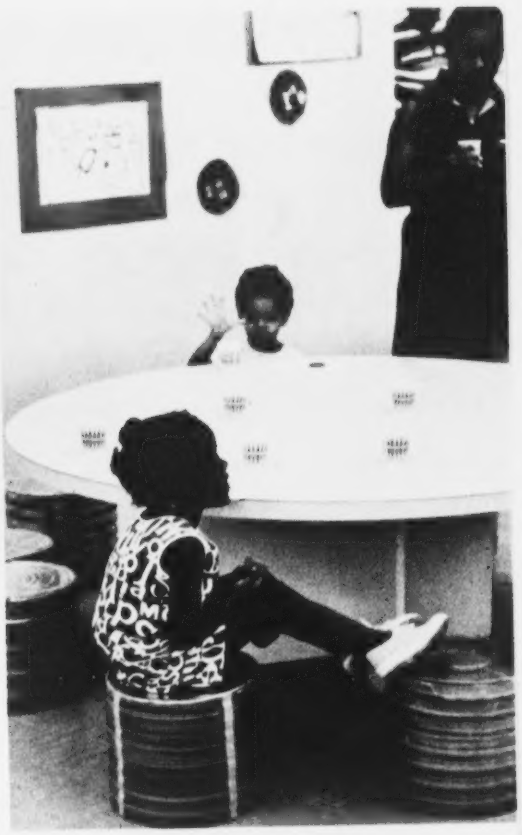
Rectangular fiberboard tubes.

Fiberboard drums.

Fiberboard boxes with plywood tops coated with blackboard paint.

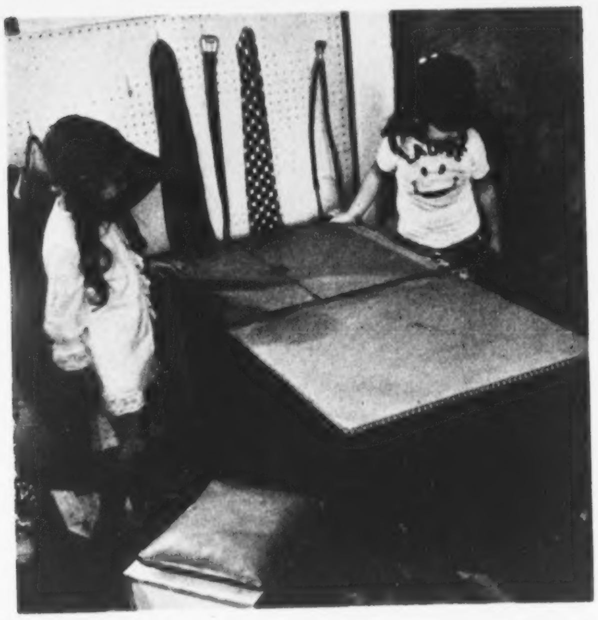


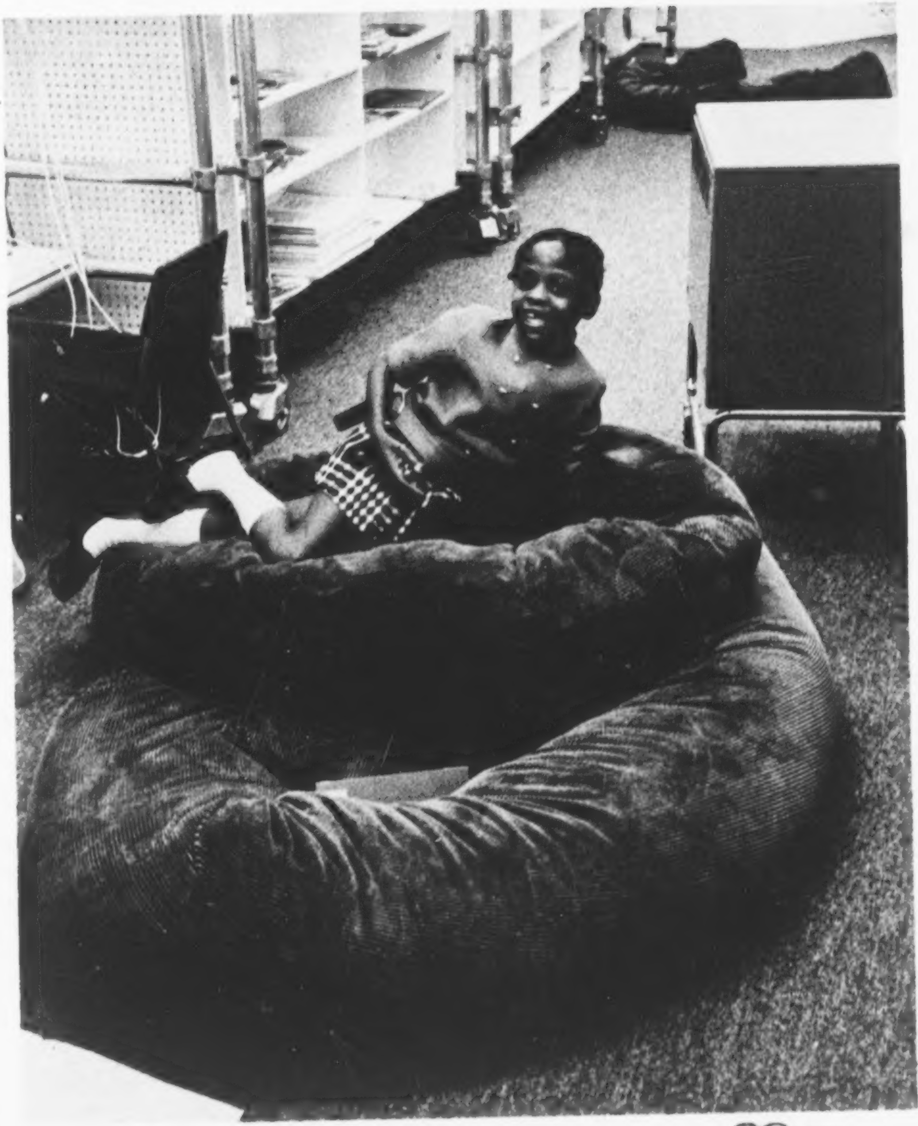
Clay chimney flues.



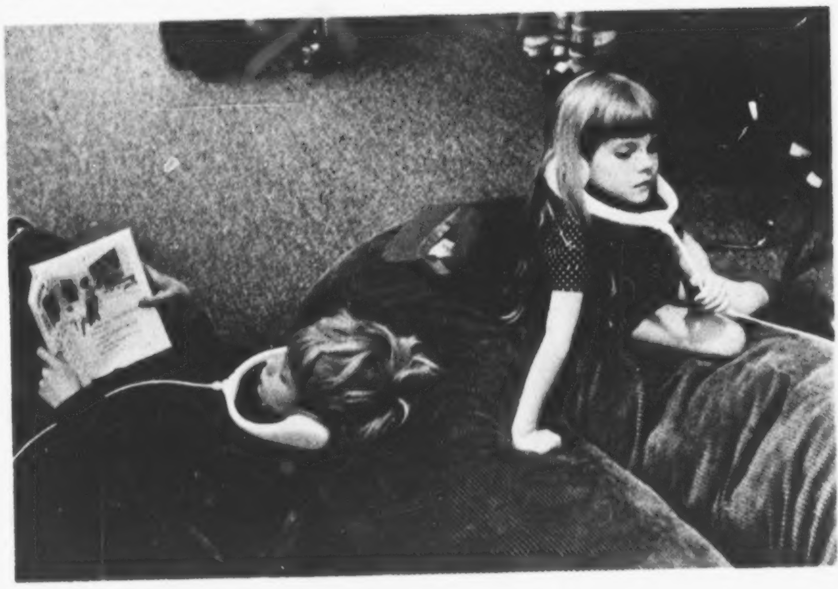
Computer tape storage cans.

Corrugated cardboard.





Fabric covered "snake"
stuffed with plastic granules.



3. outdoor

The out-of-doors is too often considered a less important learning environment than the classrooms. It is incorrect to think that a child plays outdoors but learns indoors. Primarily the child learns through play and therefore interior learning spaces are fundamentally play spaces. Similarly, outdoor spaces have great "learning" value especially where there is an easy circulation flow to the interior. Play yards are often considered merely as a place for letting off steam and are outfitted with the obligatory swings and climbing apparatus. But outdoor areas also make fine ecology centers, nature trails, or amphitheaters. Where they are possible, vegetable gardens, fruit-bearing trees, animal shelters or just a few logs in a circle for sitting like Indians in a kiva enrich outdoor places. The intensity of learning somehow seems increased when it takes place outdoors. Even when educators are aware of the values of outdoor learning for young children, they are stymied by the seeming inaccessibility of open space in cities. But what about the city rooftop? Small backyards or public spaces? Or even the neighboring vacant lots where careful planning could compensate for lack of size? This section deals with reclaimed outdoor space that in many instances served no useful public or private purpose before being intelligently transformed into learning (play) space.

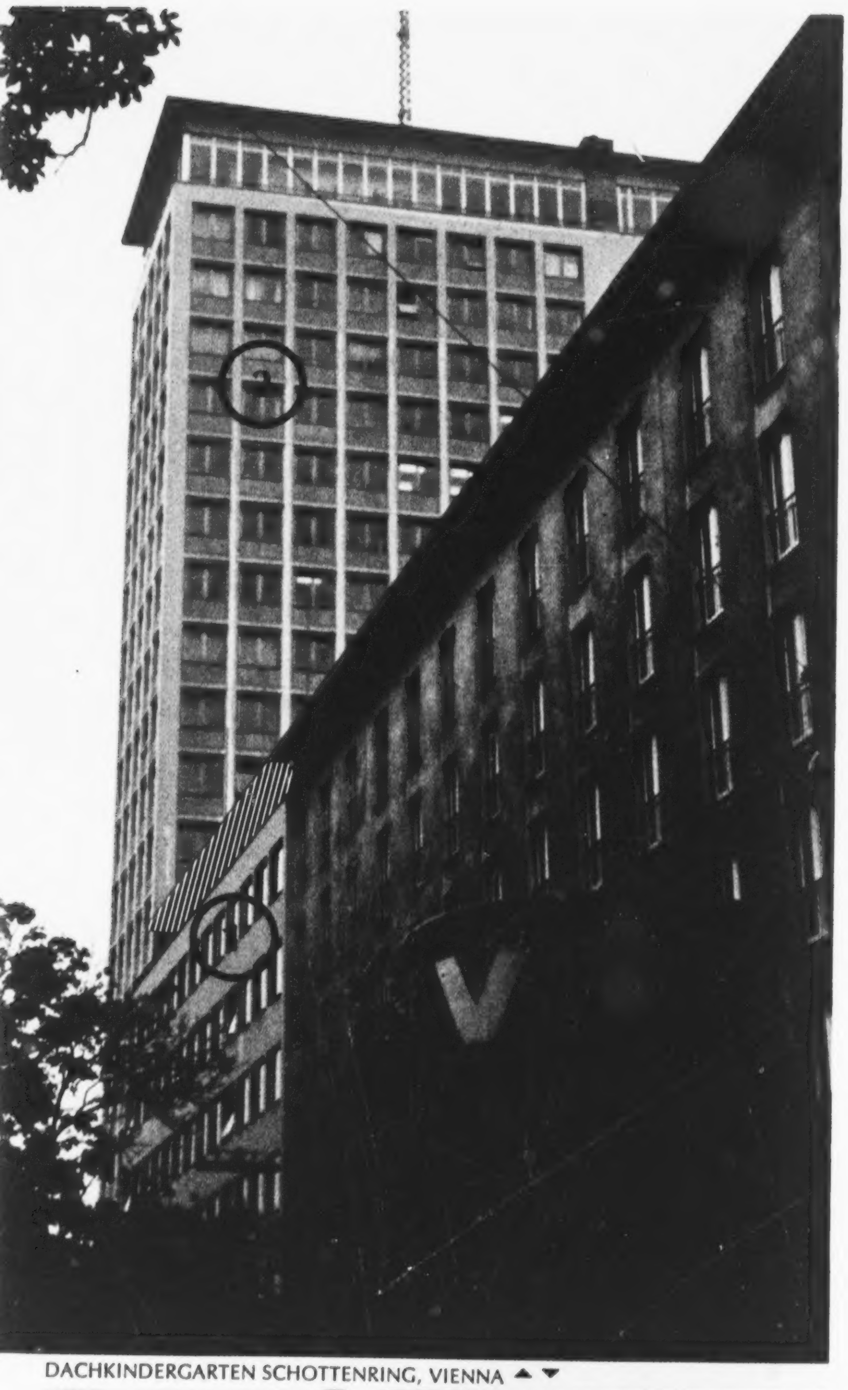
spaces

rooftops
backyards and public spaces
vacant lots

3. outdoor spaces

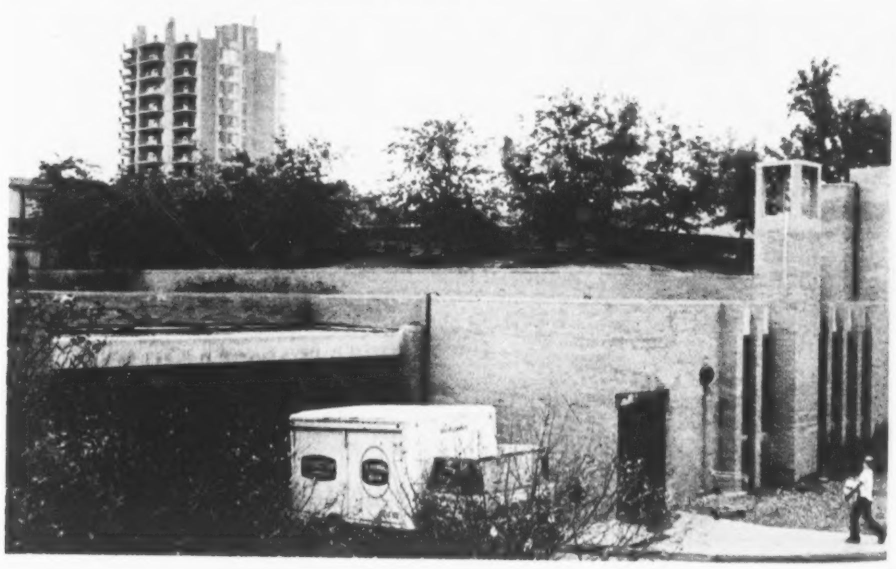
rooftops

Preschool located on the top floor of a Vienna apartment building (1) accommodates 64 children of tenants and employees of adjacent tall office building (2). Children use play area on roof, which gives spectacular view of city.



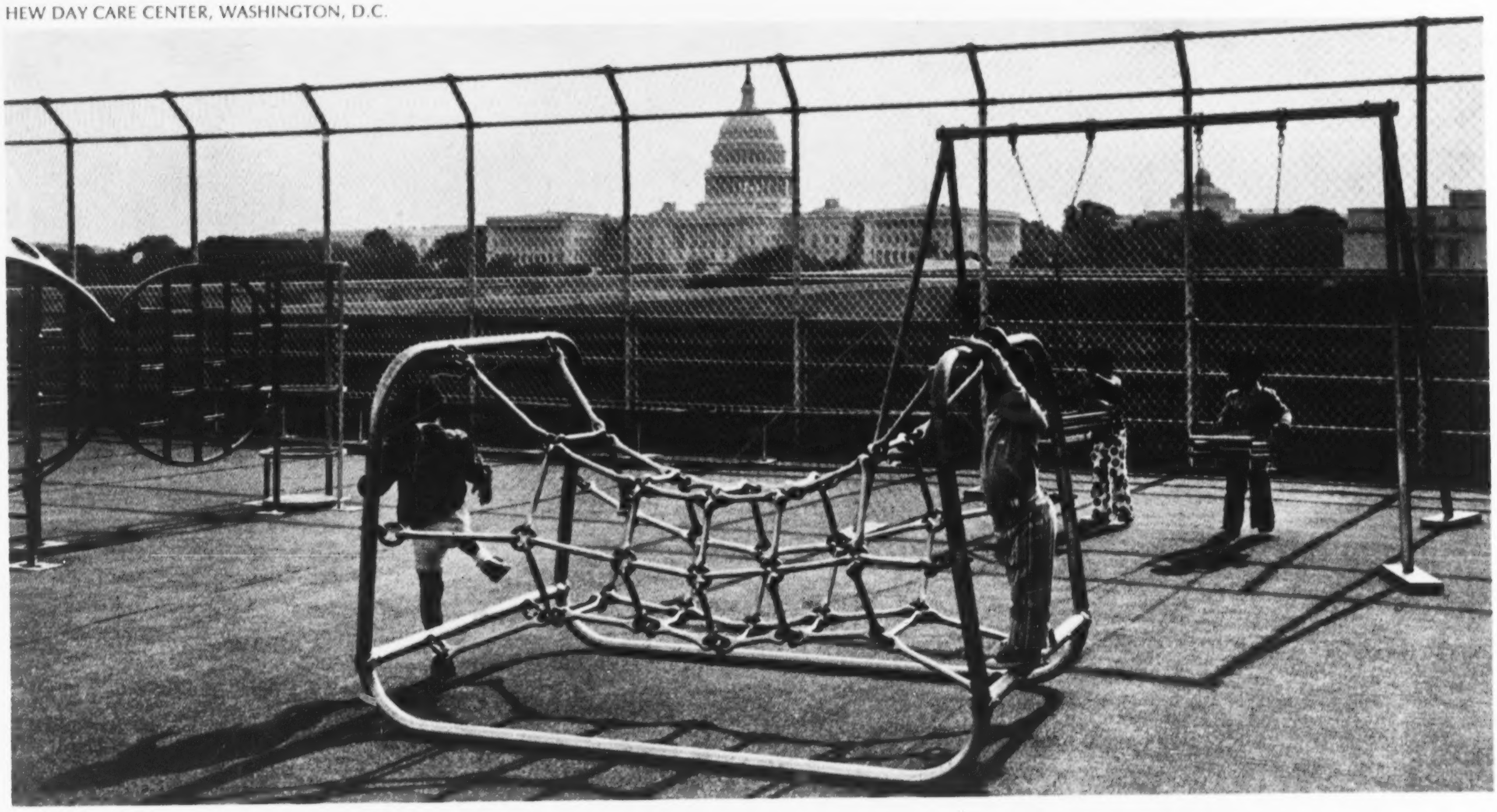
DACHKINDERGARTEN SCHOTTENRING, VIENNA ▲ ▼

LAKE ANNE NURSERY KINDERGARTEN, RESTON, VA.

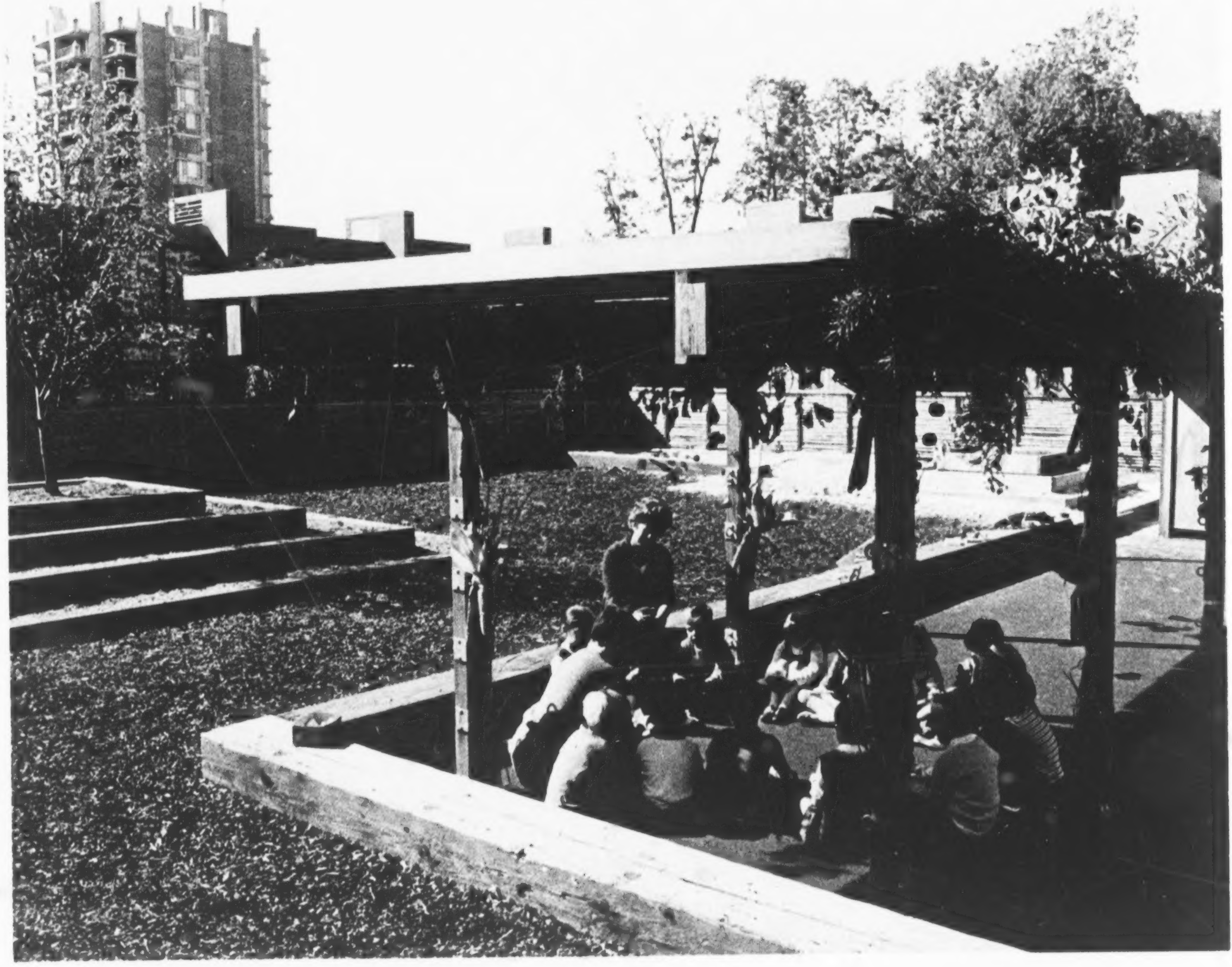


Well-landscaped garden built on roof of a supermarket. However, heavy planting is possible only if the roof is strong enough to support the weight. A building can be reinforced to carry additional roof loads.

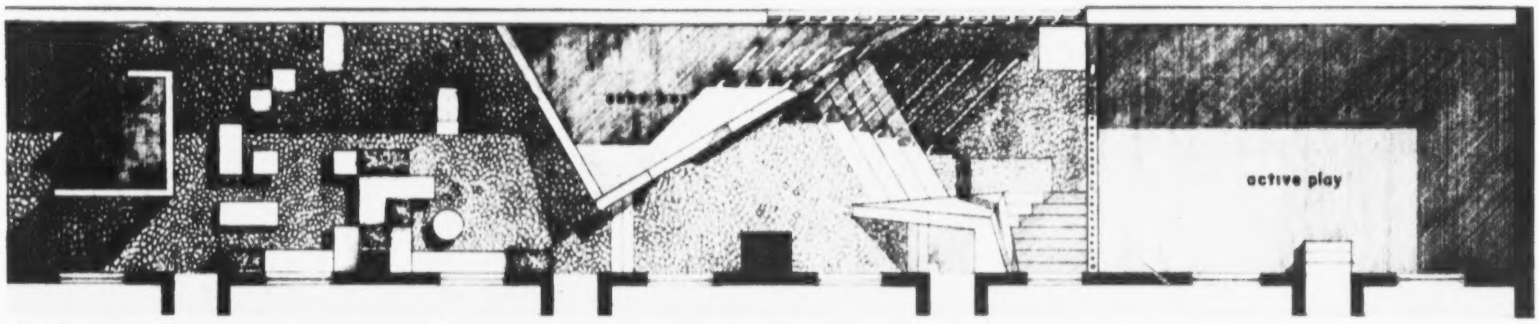
HEW DAY CARE CENTER, WASHINGTON, D.C.



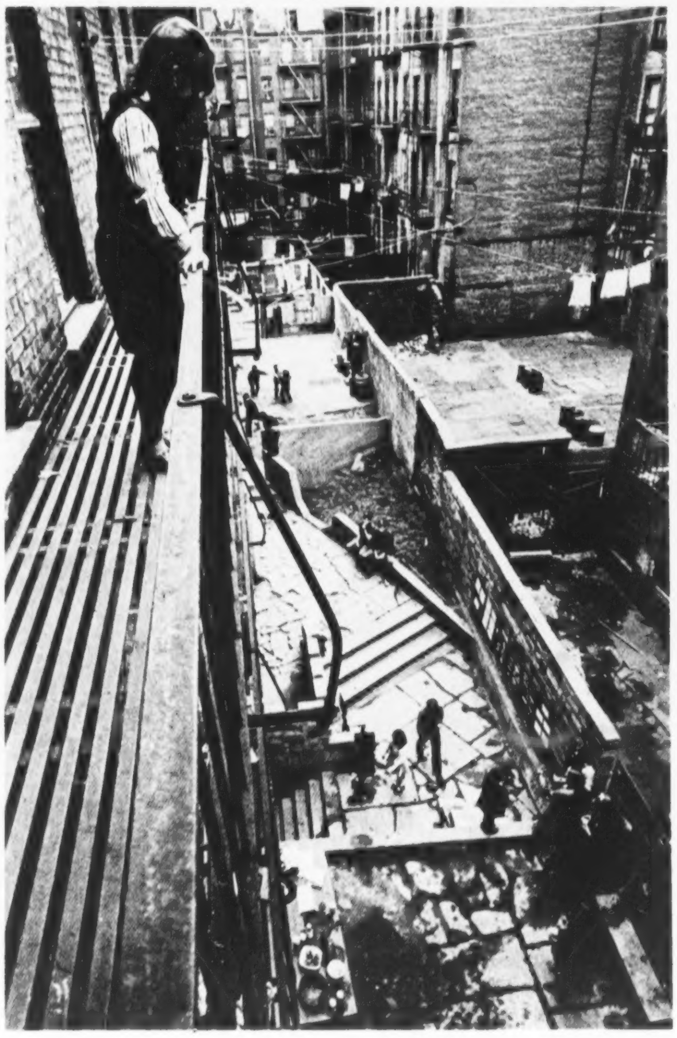
Surface of rooftop play area covered with outdoor carpet.



3. outdoor spaces



SUFFOLK STREET PLAYGROUND, NEW YORK CITY

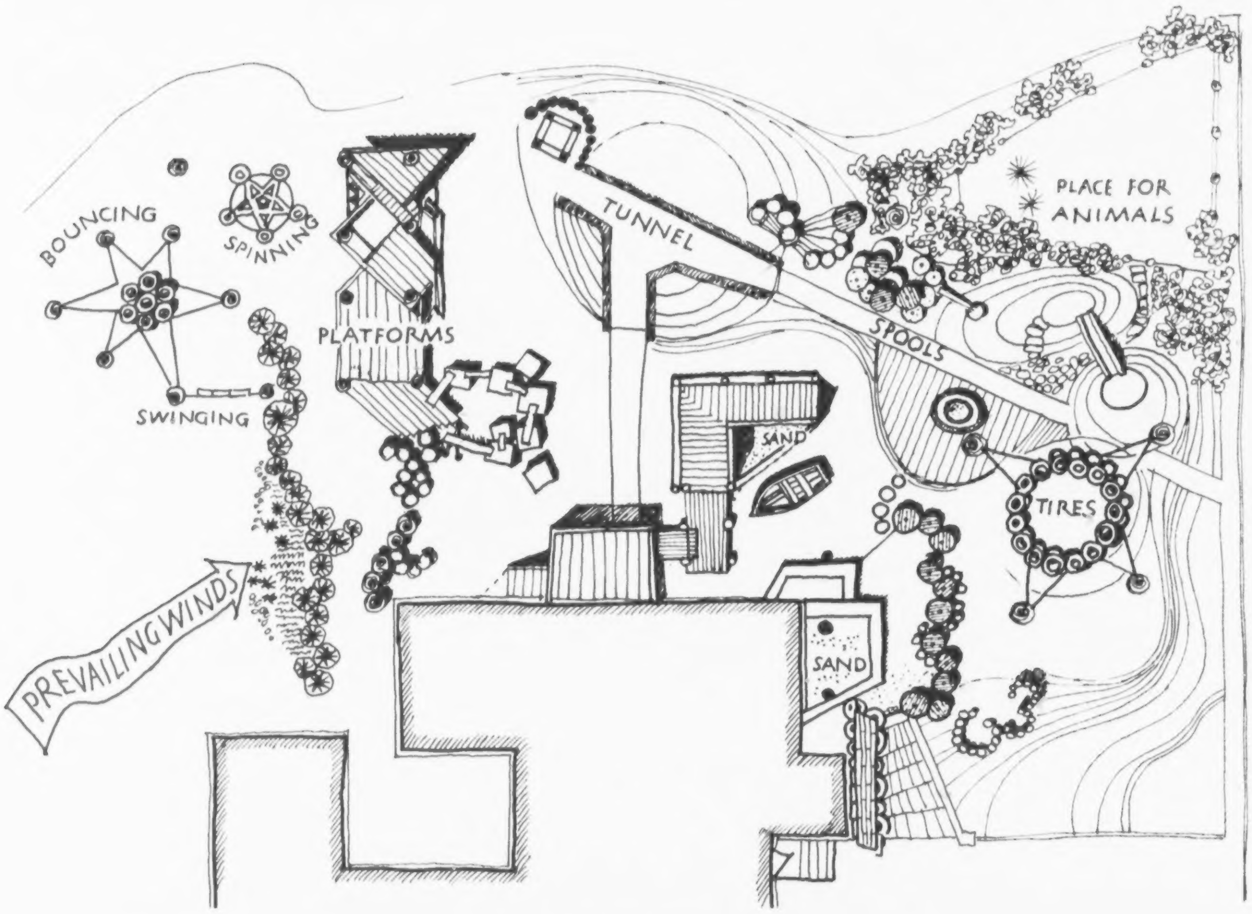


Tenants of four adjoining tenements pooled their backyards to create a 100′ by 16′ park for children. The project, built by the tenants, was financed by a foundation.

backyards and public spaces

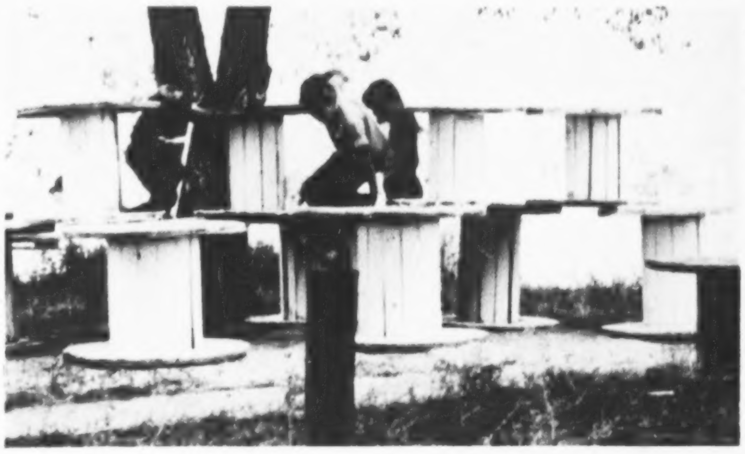
NATIONAL DEMONSTRATION CENTER
IN EARLY CHILDHOOD EDUCATION, WASHINGTON, D.C.

Sunken plaza at a federal office building serves as playground for employees' day care center. Staff cafeteria overlooks playground.

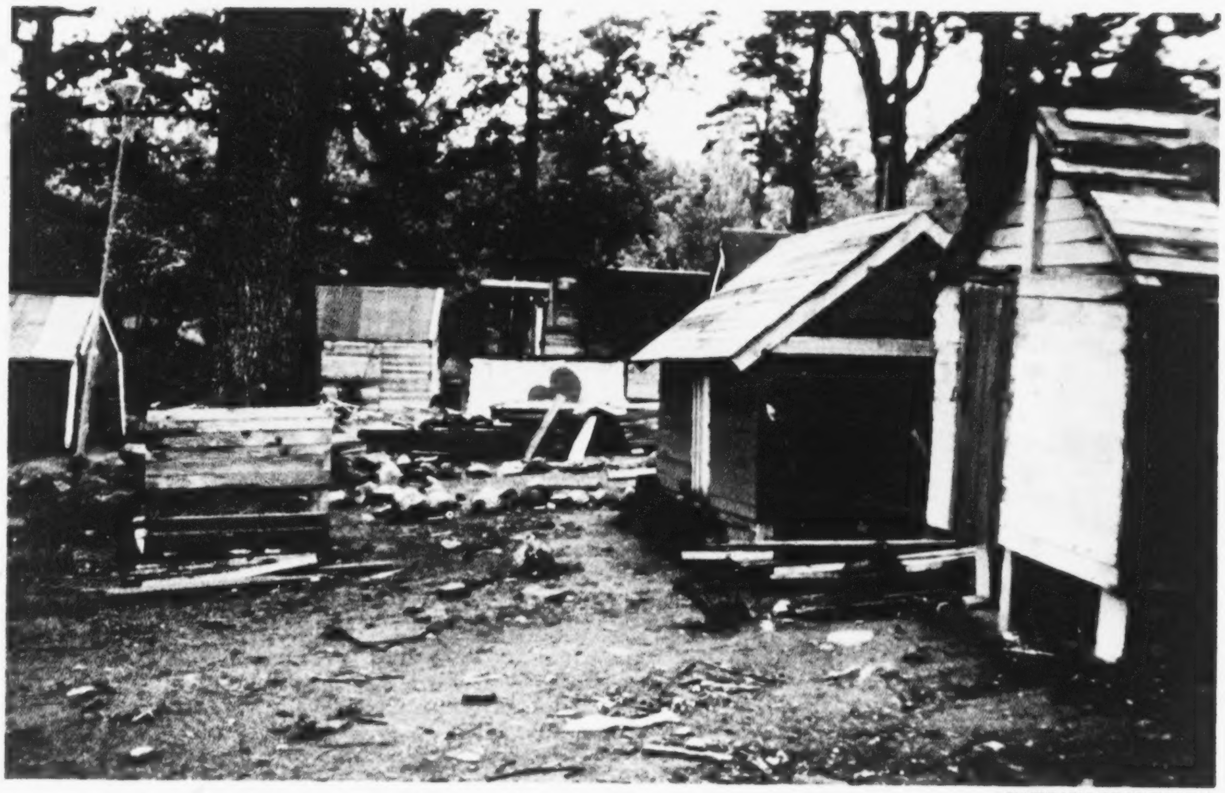

BOUNCING
SPINNING
PLATFORMS
SWINGING
TUNNEL
SPOOLS
PLACE FOR ANIMALS
SAND
TIRES
SAND
PREVAILING WINDS

ANTELOPE HEAD START CENTER, MISSION, S.D.

The small, but concerned, population of Mission, S.D., planned and built this outdoor playground with railroad ties, telephone poles, cable spools, tires, sand and bricks. Collecting materials and planning took several weeks, but actual construction took only four days.

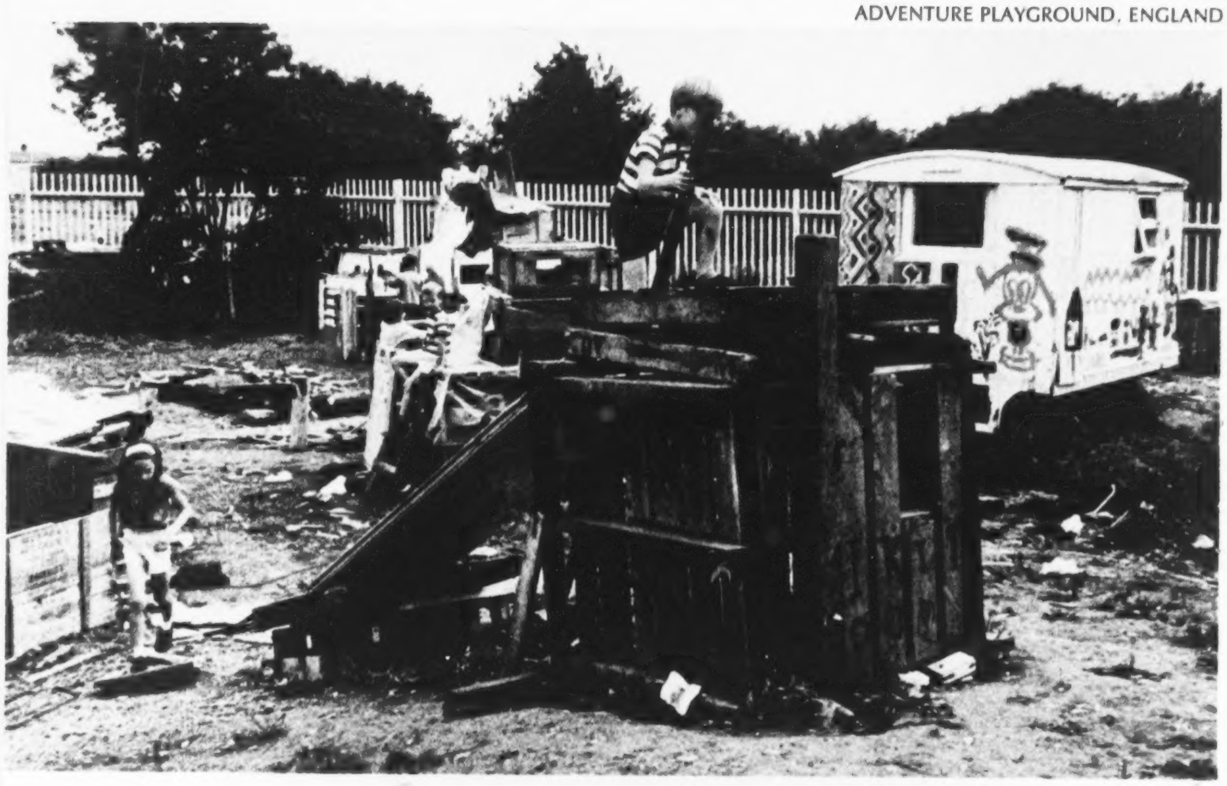


3. outdoor spaces



SWEDISH PRESCHOOL

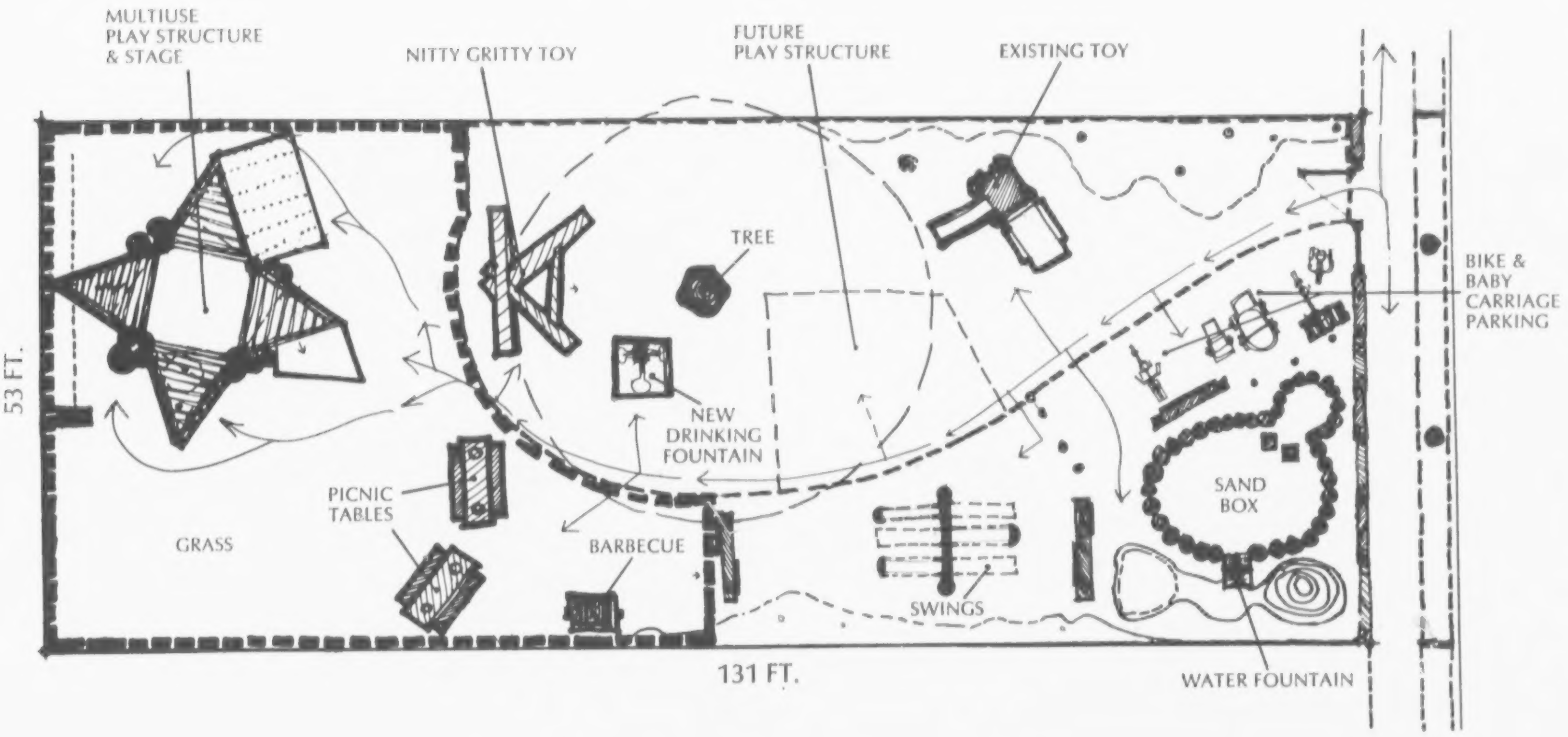
ADVENTURE PLAYGROUND, ENGLAND

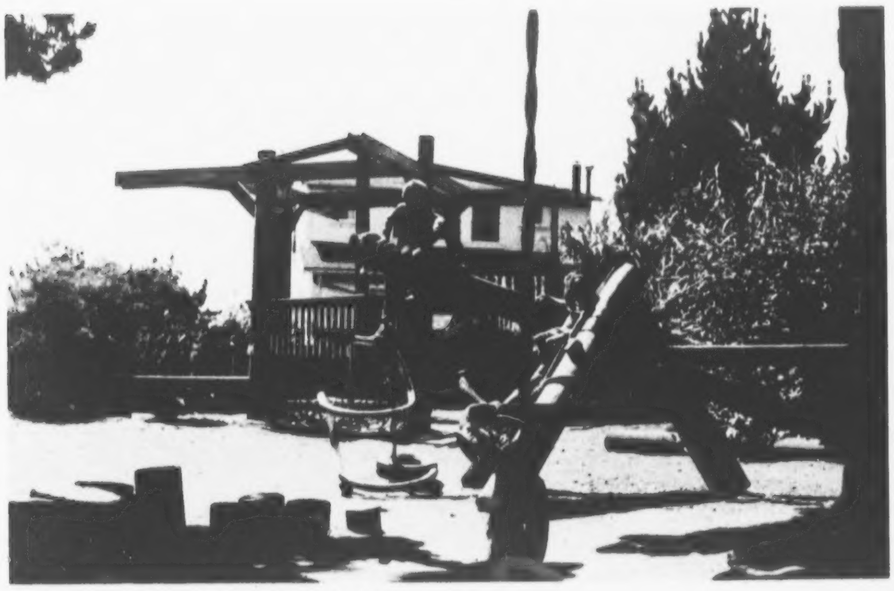


vacant lots

"Adventure Playgrounds" can be put together by children with scrap materials. Their distinguishing quality is that they are controlled by the play leaders and the children themselves who design and build them, move parts of them, add to them, paint them, change them around and if they like—destroy them. As temporary facilities requiring little investment, they are particularly suitable when only short-term leases are available. London playground for handicapped children based on adventure playground concept features overhead glide bar, wheelchair path, playroom and scribble wall.

PLAYGROUND FOR HANDICAPPED CHILDREN, ENGLAND


MULTIUSE
PLAY STRUCTURE
& STAGE
NITTY GRITTY TOY
FUTURE
PLAY STRUCTURE
EXISTING TOY
TREE
BIKE &
BABY
CARRIAGE
PARKING
53 FT.
NEW
DRINKING
FOUNTAIN
PICNIC
TABLES
GRASS
BARBECUE
SAND
BOX
SWINGS
131 FT.
WATER FOUNTAIN



ROOSEVELT STREET SITE, BERKELEY, CALIF.

Old utility poles firmly embedded in ground form the backbone of many outdoor play structures. Plan shows how play activities can be separated in a small park.

4. outdoor

Things that children most enjoy playing with out-of-doors can be put together by hand with materials that have been scrounged or bought cheaply. These play objects succeed because they stimulate children into more creative exploration than traditional equipment, and they can be built at minimum cost.
Here also, children and their parents should participate in building their own play equipment whenever possible. Now that adults are becoming aware of this, they can be seen looking for materials for play equipment in lumber yards, telephone companies, garages, marinas, construction sites, workshops and their own attics.

things

places to plant
animal shelters
objects for building
sand play
climbing on, over and through
complete play structures
other outdoor ideas

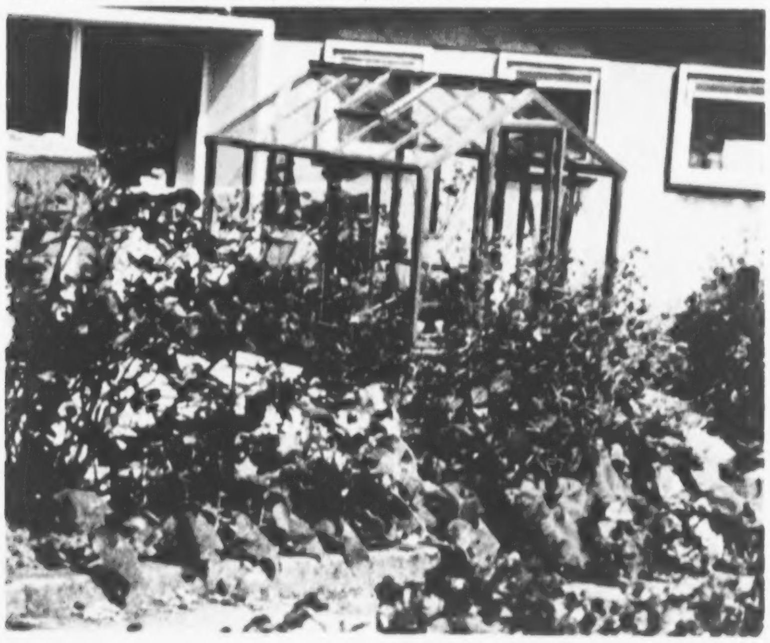
4. outdoor things

places to plant

DACHKINDERGARTEN SCHOTTENRING, VIENNA

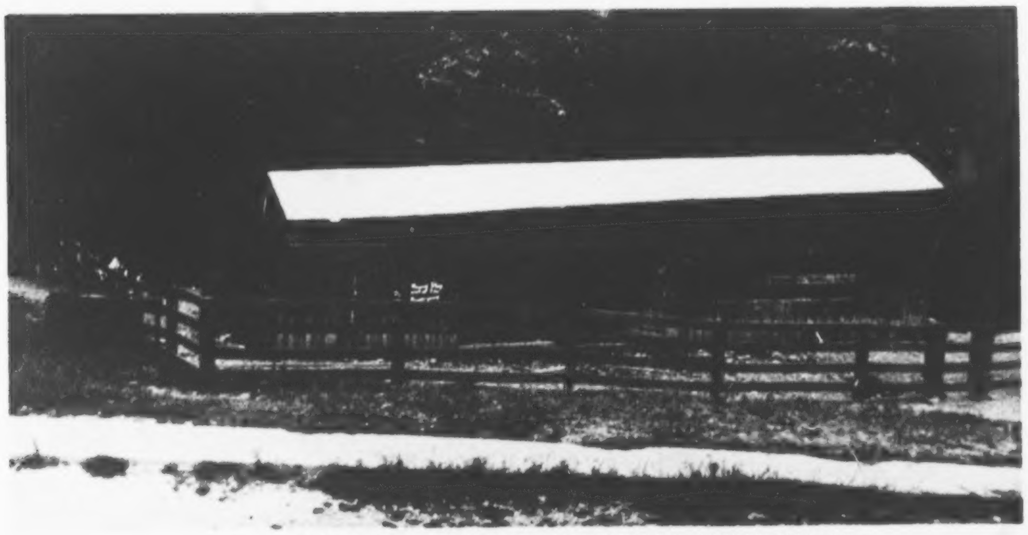
Commercial baking tins can be used as "flats" for starting plants.

SEA MILLS INFANT SCHOOL, BRISTOL, ENGLAND



Greenhouses similar to this can be made with polyethylene stapled over wood frames.

WESTMORELAND DAY CARE AND NURSERY SCHOOL, WASHINGTON, D.C. ▼

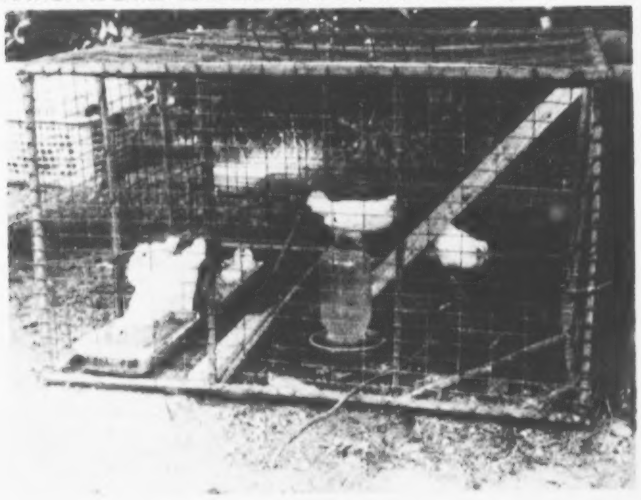


BURGUNDY FARM COUNTRY DAY SCHOOL, ALEXANDRIA, VA.

Farm animals are members
of the "teaching staff"
at this country school.
In larger enclosures,
animals are free to roam
and children are free to visit them.

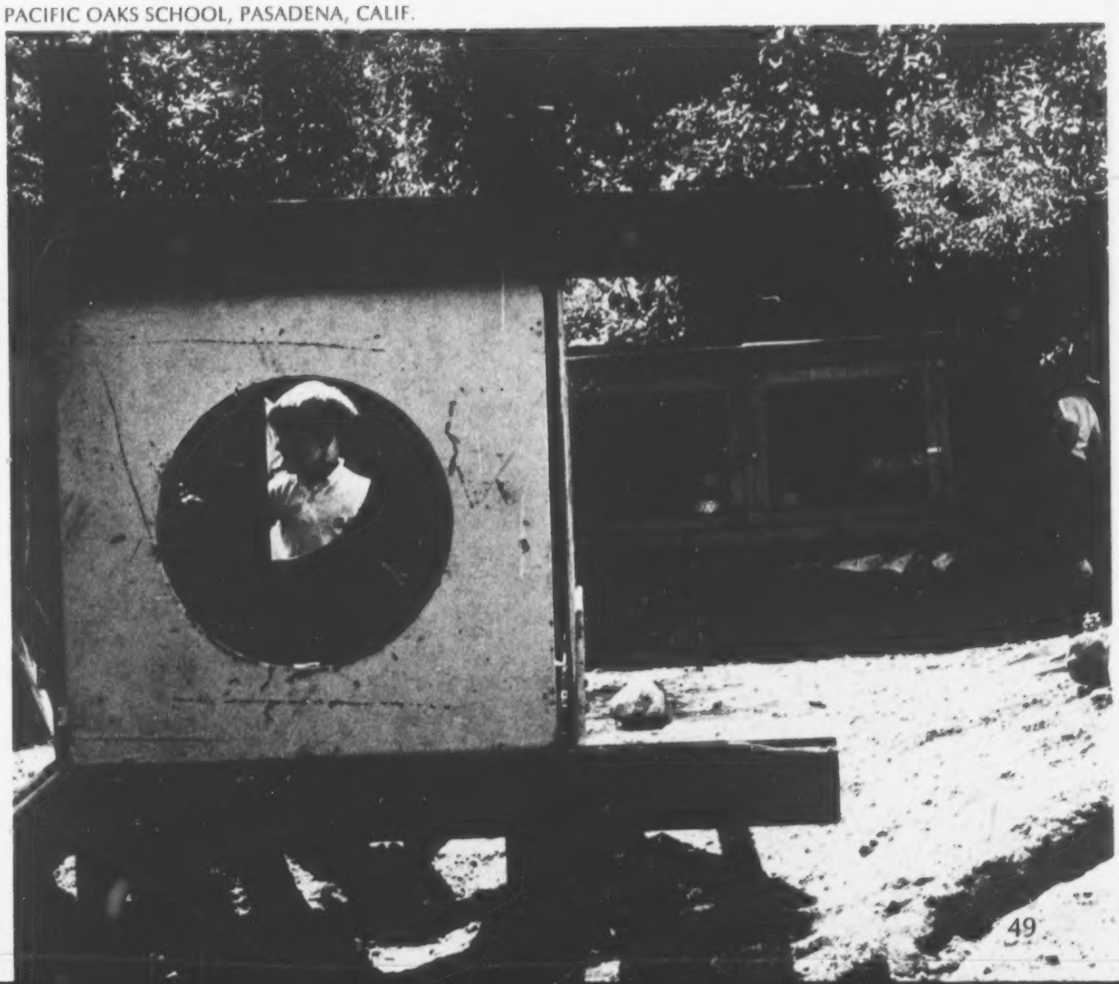
animal shelters

NATIONAL CHILD RESEARCH CENTER, WASHINGTON, D.C.



Chicken coops and
rabbit hutches made
from wire mesh.

PACIFIC OAKS SCHOOL, PASADENA, CALIF.



4. outdoor things

PACIFIC OAKS SCHOOL, PASADENA, CALIF.

objects for building

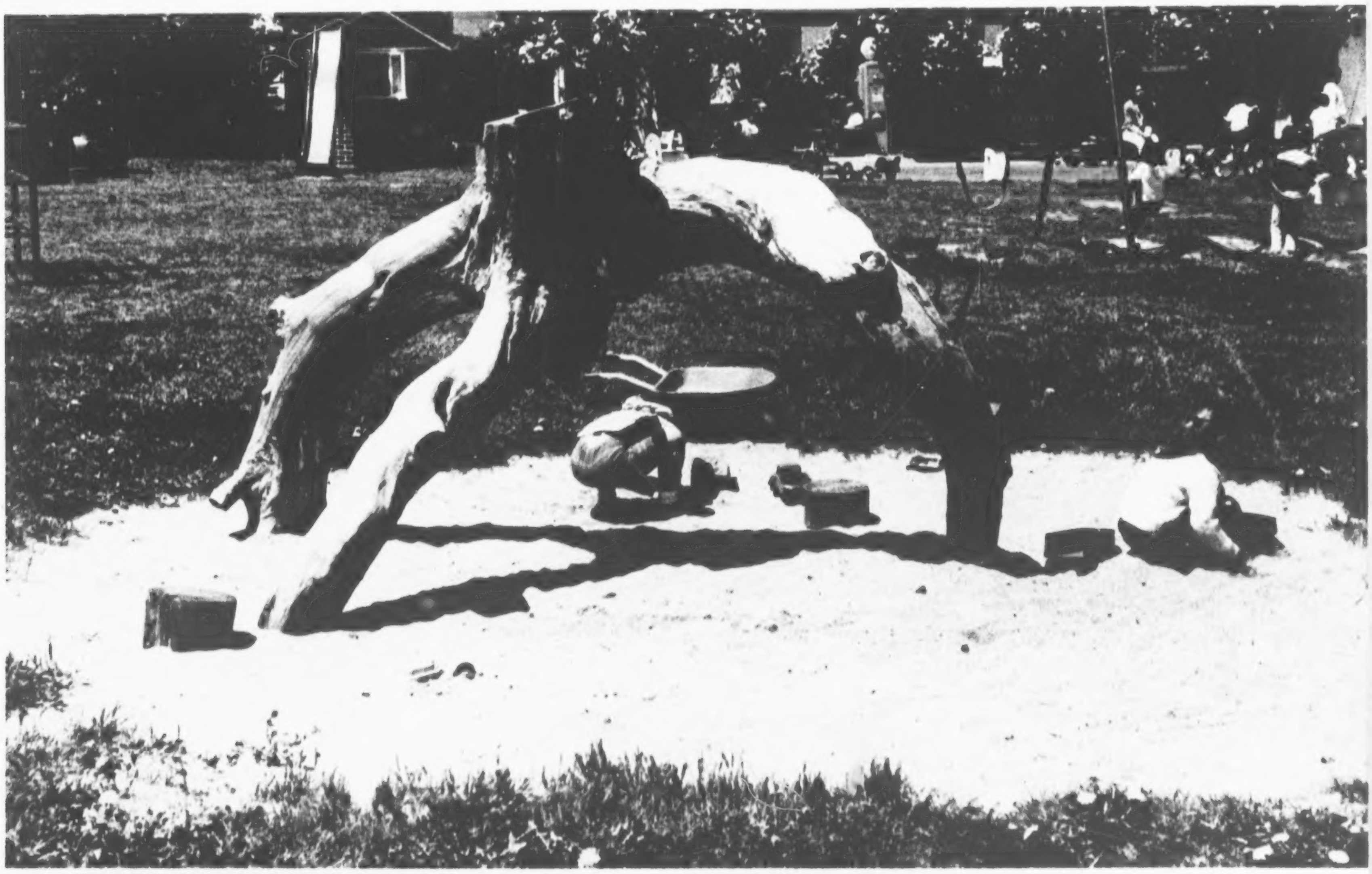
CENTRAL PARK ADVENTURE PLAYGROUND, NEW YORK CITY ▼

Slotted boards, boxes and planks allow manipulative skills to be developed.

sand play

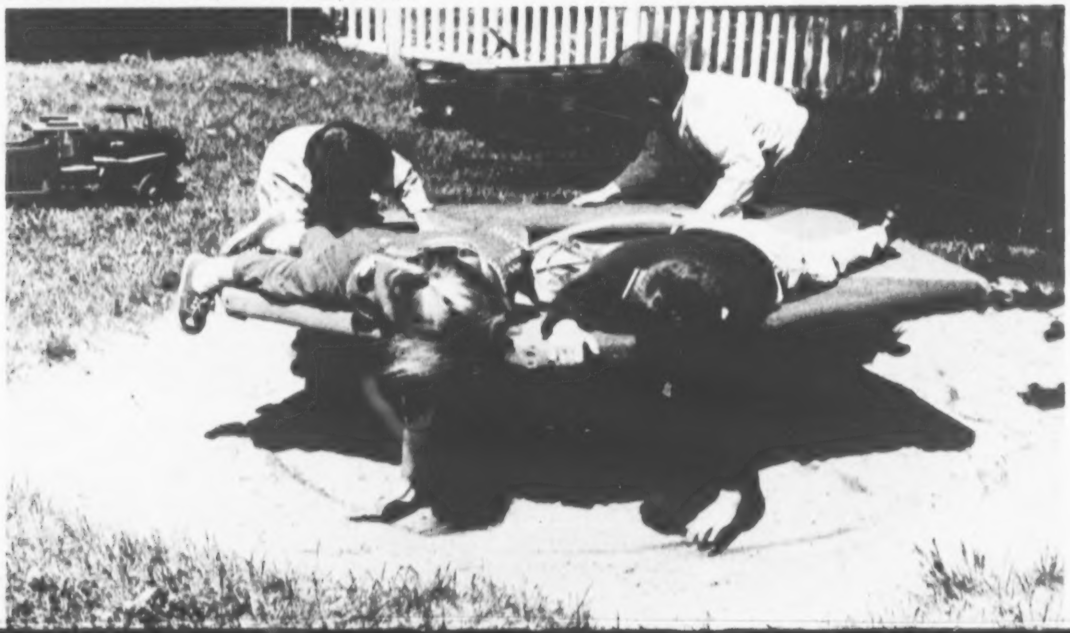
Sand can be confined
to ashcans and boxes
or spread out on
the ground.

PHOEBE HEARST PRESCHOOL LEARNING CENTER, SAN FRANCISCO, CALIF.



LITTLE BRICK SCHOOL, LITCHFIELD, CONN. ▲▼

Dead trees can be trimmed
and relocated to make
interesting shapes.

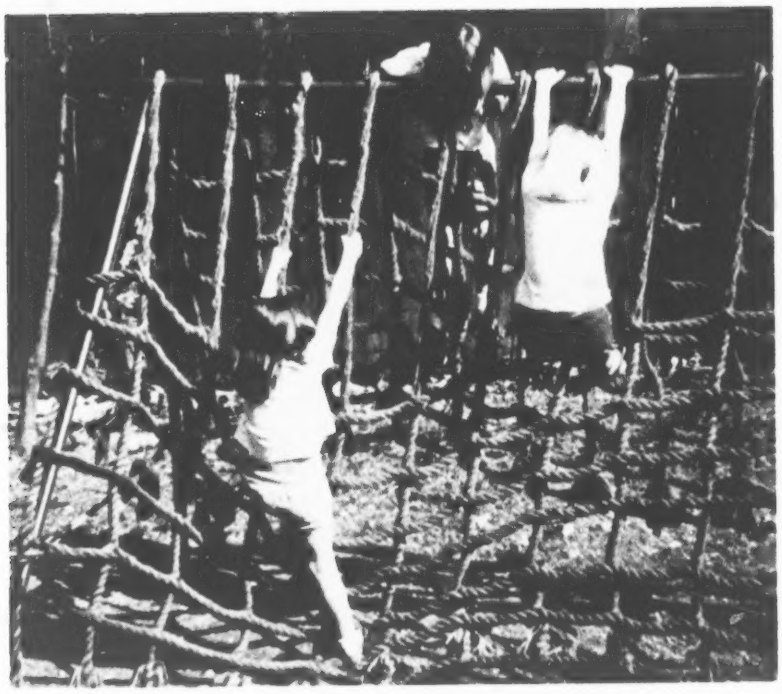


Wagon wheel covered with
plywood and outdoor
carpet makes a good
rotating platform.

4. outdoor things

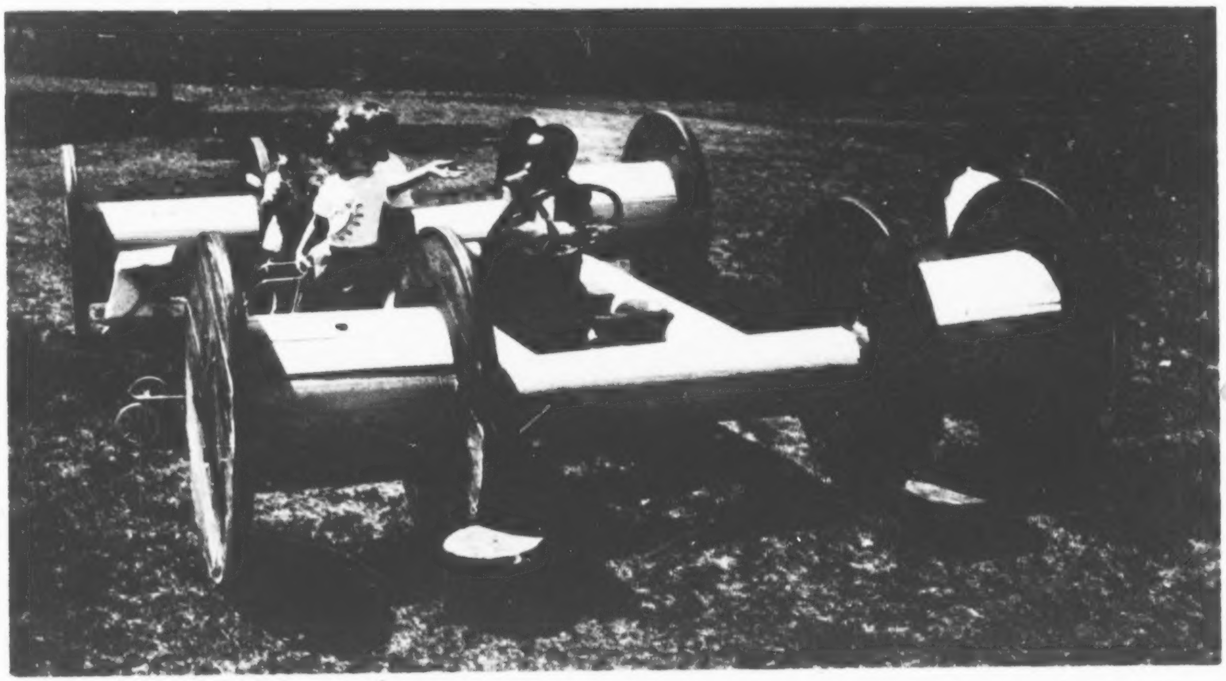
climbing on, over and through

Outdoor playthings can easily be made with discarded tires, steel drums, cargo nets, boxes, autos, boats, mattresses, timber pilings, cable spools and excavated earth mounds.



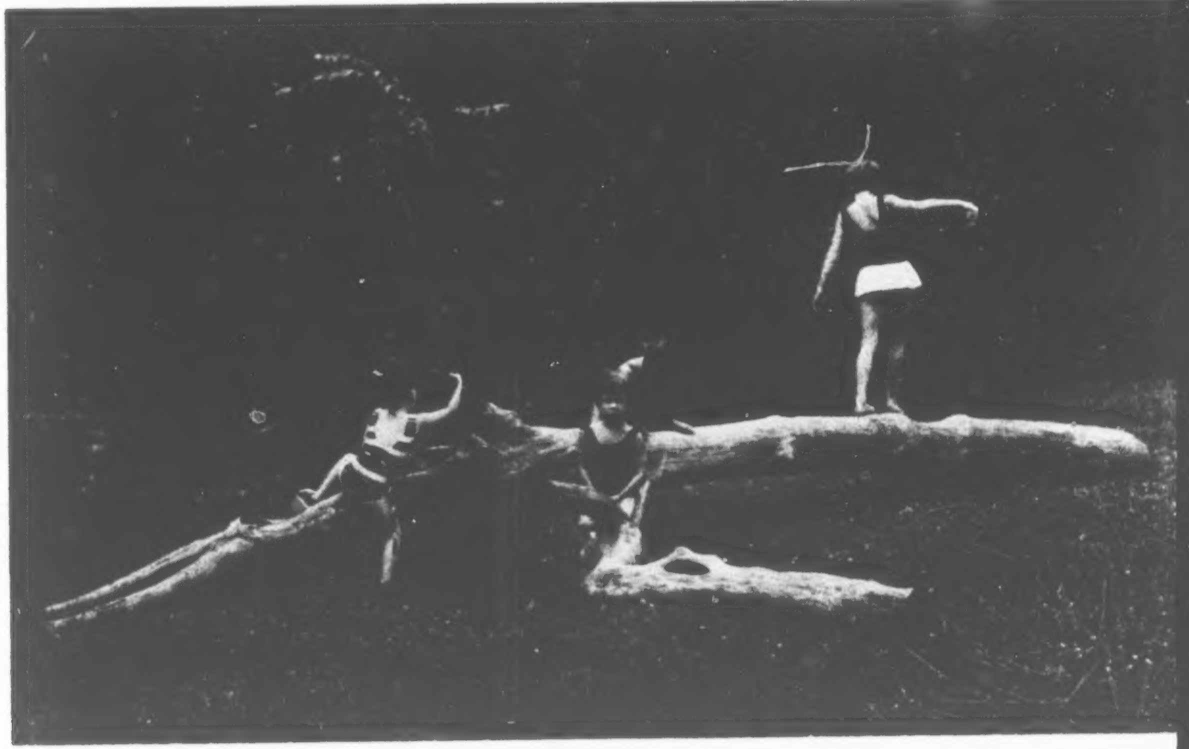
4. outdoor things

climbing on, over and through



Versatile uses of cable spools.

Found tree makes
a "balance beam".

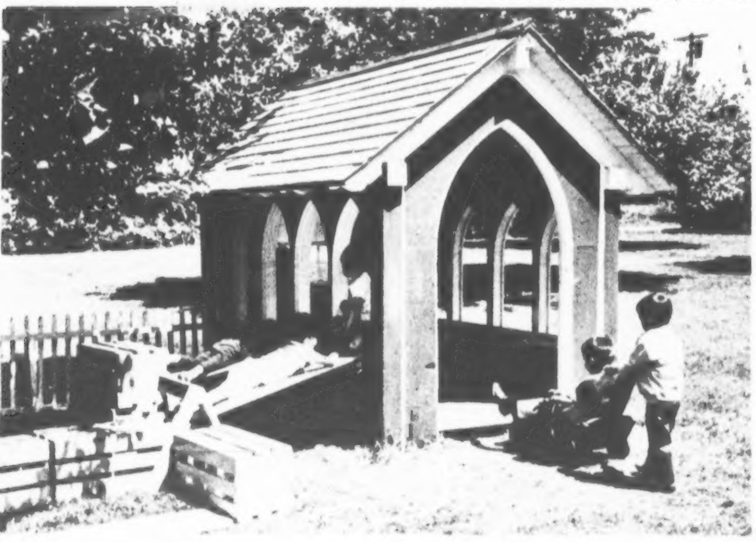


Excavated earth
packed into a mound.

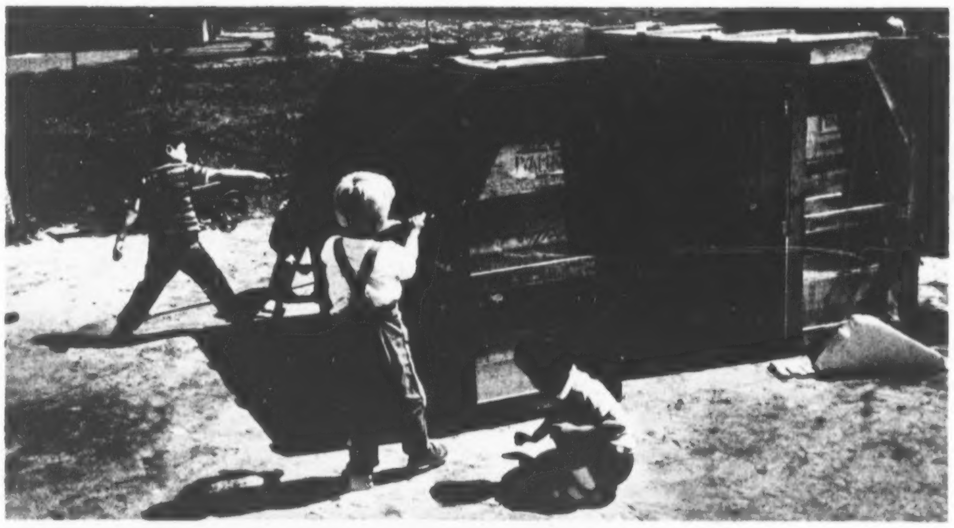
Tree slices can be
set into the ground.

4. outdoor things

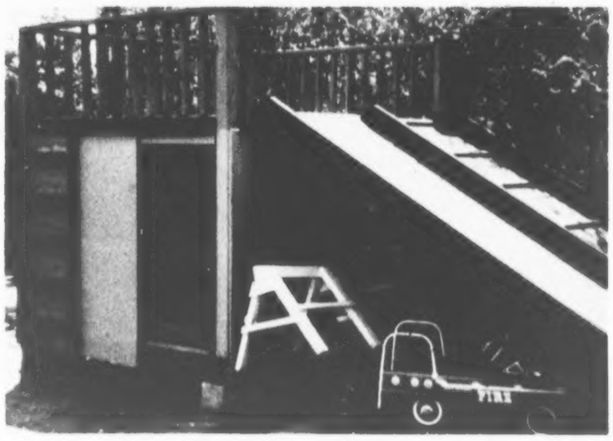
BING NURSERY SCHOOL, STANFORD, CALIF.



A church cupola.



Piano crates.



Overseas packing carton.

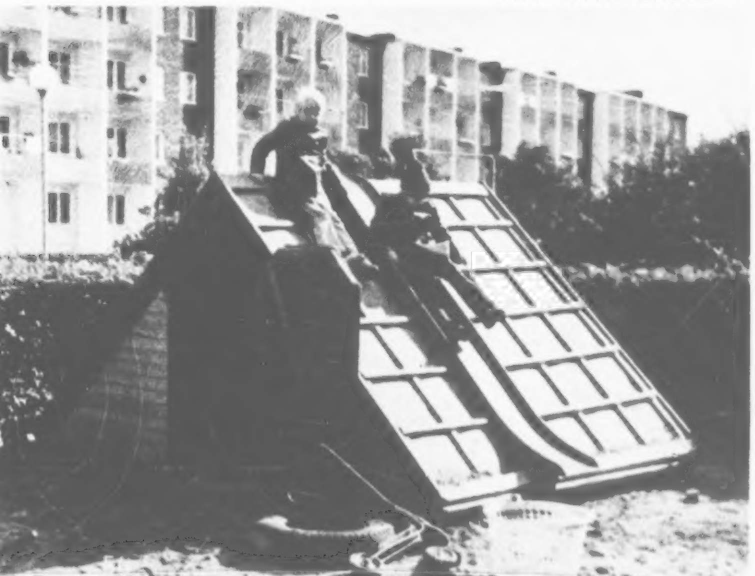
complete play structures

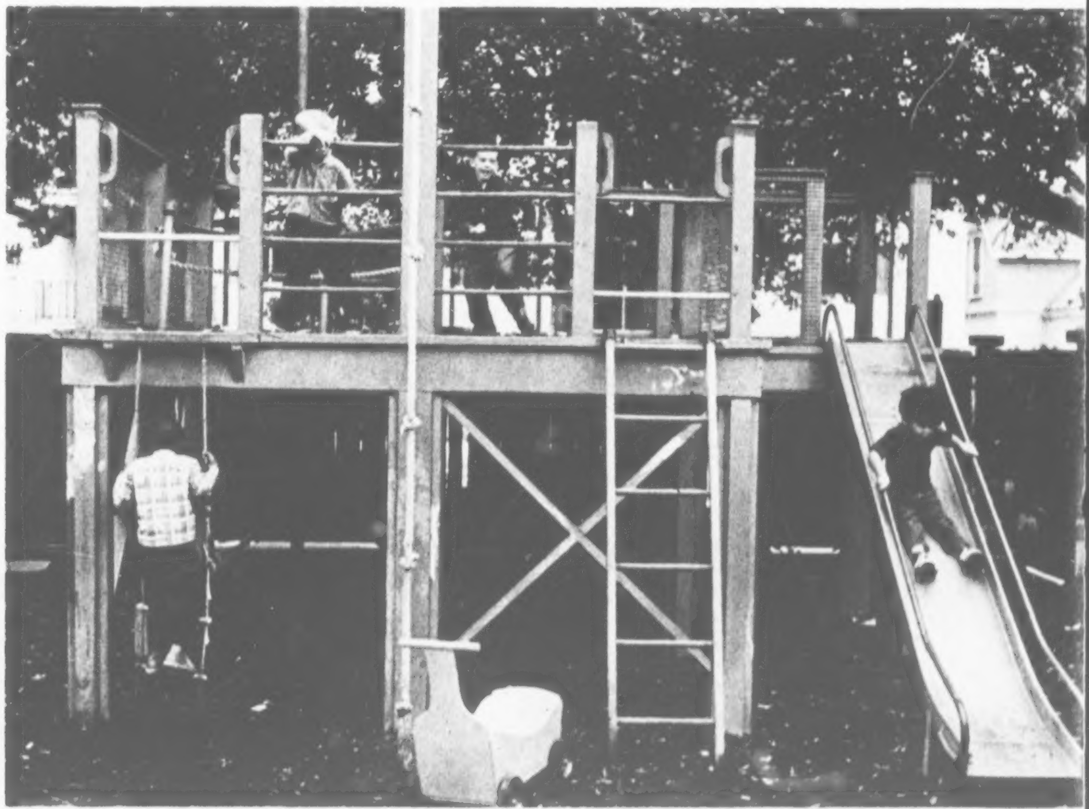
Similar structures can be built from new or discarded lumber. Some interiors provide rainy day shelter as well as storage.

WESTMORELAND DAY CARE AND NURSERY SCHOOL, WASHINGTON, D.C.

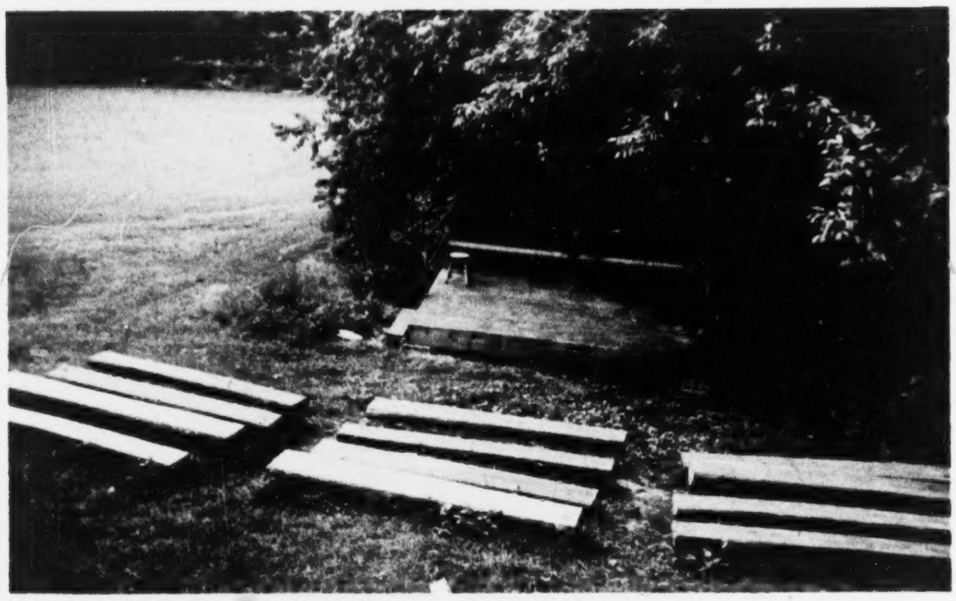
Fort Apache

SWEDISH PRESCHOOL ▼





Split logs set
into a grassy
slope creates
an amphitheatre.

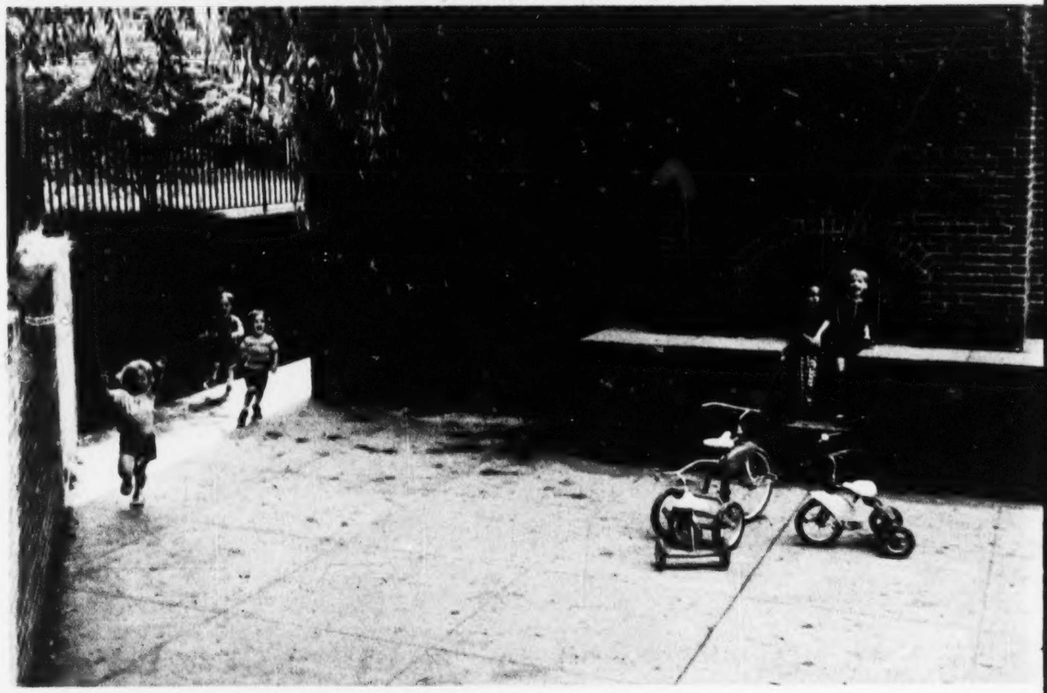


BURGUNDY FARM COUNTRY DAY SCHOOL, ALEXANDRIA, VA.

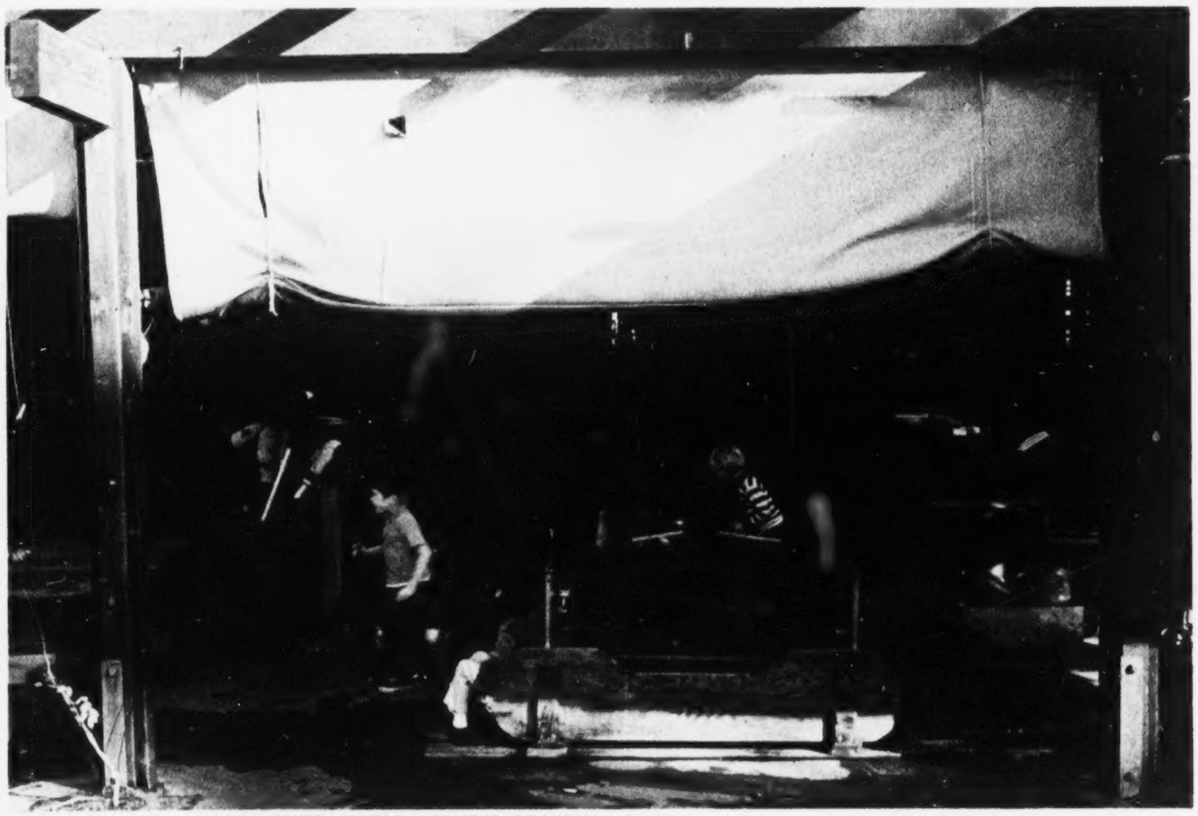
Hard surface made of tamped earth, concrete or asphalt provides a path for tricycles and scooters.

NATIONAL CHILD RESEARCH CENTER, WASHINGTON, D.C.

WESTMORELAND DAY CARE AND NURSERY SCHOOL, WASHINGTON, D.C.



This existing fireplace was retained for "cookouts".



◀ ▲ HAROLD E. JONES EARLY EDUCATION CENTER, BERKELEY, CALIF.

Roll of canvas
for sun shelter.

5. how to go

Most day care centers are started by parents who want their own children to attend them. There's no particular sequence of moves for a group of interested parents to make, but any steps that are taken will become wasted motion unless the group is fiercely determined to follow through. Countless groups of frustrated parents never obtain their day care facilities because they give up in the face of bureaucracy, communal pessimism, lack of funds or weak leadership.

All these obstacles can be climbed around or over if the group has a strong leader and its members are able to share the burden of running the committees concerned with financing, site selection, facilities, equipment, and staffing. This publication deals with two of these; facilities and equipment.

The persons concerned with these should, ideally, have experience with building. The chances are that no committee member will have that background, so the group either has to hire a consultant or acquire its own capabilities to deal with these matters.

Don't be overawed by the prospect of using consultants. There are individuals or small firms of designers, architects and educators who are familiar with the requirements for early educational facilities. They accept small contracts, and their charges are within the means of most day care groups. To find these consultants you could ask the sponsors of established centers, or write to the organizations listed on page 61.

about it

sources for help
licensing requirements and codes
found objects—a check list

60

5. how to go about it

With or without outside help, the first task in starting a day care center is to find a suitable location. There are far too many potential places to be listed, but the following broad recommendations should be considered.

1. Visit other child centers and evaluate them for your group in terms of program, facilities, operation and accomplishments. Be sure to be influenced by centers outside your immediate neighborhood. This can be done by researching published material on completed centers in other states and even outside the U.S.

2. Investigate local health, zoning, and building codes that regulate the type of facility your group intends to establish. Don't be intimidated by the morass of requirements for day care and learning centers set down by jurisdictional agencies. Many such regulations are now being re-evaluated and revised to be more responsive to the true needs of children, their parents, and the community at large. (See codes on page 62.)

3. Canvass the available places where your proposed center could reasonably function. Whether they are at present occupied or vacant will not be a major concern, since shared space is a frequent and economical recourse. Look for space in churches, storefronts, warehouses, schools, apartment buildings, community rooms, and large private homes or row houses.

4. Avoid any commitment that might obligate your group to rent, occupy, purchase or renovate an existing building unless it has been thoroughly and competently examined for existing building code violations as well as structural, mechanical, electrical, plumbing, or architectural conditions. At this point the professional advice of a lawyer, architect and engineer may avoid costly oversights or misjudgments.

Sources for help

After your group has established its basic objectives and organization, it should approach the federal, state, municipal or neighborhood agencies that are set up to advise and assist. Help may come in the form of direct funding or procedural information for establishing your center. The bibliography in this report lists useful publications concerned with environment planning for your children.

These national organizations are concerned with the planning of preschool centers.

1. Association for Childhood Education International
   3615 Wisconsin Avenue, N.W.
   Washington, D.C. 20016
2. Child Welfare League of America
   67 Irving Place
   New York, N.Y. 10010
3. Institute for Development of Educational Activities, Inc.
   P.O. Box 446
   Melbourne, Florida 32901
4. National Association for the Education of Young Children
   1834 Connecticut Avenue, N.W.
   Washington, D.C. 20009
5. U.S. Department of Health, Education, and Welfare
   Office of Child Development
   Washington, D.C. 20201
6. Office of Economic Opportunity
   Project Head Start
   1200—19th Street, N.W.
   Washington, D.C. 20506
7. Day Care and Child Development Council of America, Inc.
   1426 H Street, N.W.
   Washington, D.C. 20005

Useful information is also available from state universities, municipal and state agencies concerned with child care facilities, and the local day care association. Some of these agencies are under your local Department of Health. Don't overlook neighborhood civic associations and community action groups, business organizations, nearby elementary schools, high schools and universities, especially where education or architectural curricula are offered.

Licensing requirements and codes

There is no such thing as a national uniform building or licensing code that pertains to day care or early learning facilities. Each jurisdiction is autonomous, and therefore the regulations vary widely. National codes are recommended by the National Board of Fire Underwriters or Life Safety Code of the Fire Protection Association, but local jurisdictional agencies take precedence. If pending federal legislation is enacted for setting up federal child care centers, it will probably result in the adoption of national codes as the basis for licensing.

Nevertheless, there are many similar requirements in the various health and building codes throughout the country. In outline form, the following general features appear in most of the more detailed codes; however, your local codes must be followed in all specifics.

Check with these regulatory agencies:

- *State Health Department*—for licensing requirements
- *Building Department*—for compliance with the building code
- *Zoning Department*—for compliance with zoning codes
- *Department of Social Services*—for related services it can provide
- *Local Board of Education*—in certain localities this is required
- *Fire Marshal*—exit requirements and combustibility characteristics of the building

Typical health department and building and zoning code requirements for the licensing, operation, construction or remodeling of child care facilities.

1. **Duration of licenses:**
   One year; annual renewal required.
2. **Licensing agency:**
   Varies, usually the State Department of Public Health and Mental Hygiene.
3. **Admission policies:**
   - a) No child under 24 months of age without specific approval.
   - b) No child requiring special care is admitted without specific approval.
   - c) Medical examination is required for each child.
   - d) Immunization certificates are required for each child (generally smallpox, polio, tetanus).
4. **Physical plant:**
   - a) *Accessibility:* Premises must be served by a good all-weather road accessible to emergency vehicles.
   - b) *Telephone:* Building must have a minimum of one telephone (not a pay station).
   - c) *Basements:* Basements entirely below ground may not be used for the care of children.
   - d) *Room Height:* Minimum height of rooms to be 7$^1/_2$ ft.
   - e) *Outdoor Play Space:* Each center shall have an outdoor fenced playground of at least 100 sq ft per child in attendance.
   - f) *Interior Learning Space:* A minimum of 35 sq ft of usable floor space, exclusive of corridors, kitchens, bathrooms, offices, isolation rooms, storage space, and permanent sleeping space shall be provided for each child.
   - g) *Window Area:* The total window area of each room used for play activities must be at least 10% of the floor area of the room.
   - h) *Openable Windows:* Not less than 5% of the floor area of the room.
   - i) *Isolation:* Suitably equipped space must be available for the isolation of ill children.
   - j) *Paint:* All interior paint and that exterior paint accessible to children must not contain more than 1% lead.
   - k) *Ventilation:* Each toilet room must be equipped with an operable window or with mechanical ventilation (see openable window requirements).
   - l) *Fire Control:* Adequate fire control equipment, fire exits, escapes, and evacuation procedures, as required by local fire codes.
   - m) *Heating:* Interior rooms must be maintainable at 70F during 0F exterior temperature (Note: Portable space heaters are generally prohibited.)
5. **Safety:**
   - a) *Circulation:* Stairways and hallways must be kept free of obstructions and must be well lighted.
   - b) *Storage:* Flammable products must be stored in a safe manner. Drugs, cleaning agents, pesticides and poisonous products must be stored apart from food and out of reach of children.
6. **Sanitary provisions:**
   - a) *Drinking Water:* One fountain per 40 children must be easily accessible to all children.
   - b) *Toilets:* One w.c. must be provided for every 15 children.
   - c) *Lavatories:* One washbowl must be provided for every 15 children.
   - d) *Cleaning:* The floor of the toilet room must be of water-resistant, non-absorbent finish.
   - e) *Building Waste:* All sewage disposal, water supply, plumbing, refuse collection, etc., must be in strict accordance with local building and health codes.
7. **Lighting:**
   Illumination Levels: Each room used for children's activities must be provided with sufficient artificial lighting so that the combined natural and artificial light will provide illumination of at least 15 foot-candles at play surfaces. (A minimum of 10 foot-candles is required on all stairways and corridors.)
8. **Glare prevention:**
   Sun Control: Provide shades at all windows exposed to direct sunlight.
9. **Insect screening:**
   Window Screens: Must be provided at all doors and windows that are operable. Screen doors are to be self-closing.
10. **Utilities—gas and electric:**
    Installations: Utility installations must conform to building department and local utility company regulations.
11. **Fuel handling:**
    Installations must conform to state and local fire codes and local fuel supply company regulations.
12. **Food service:**
    Class A: For service of up to nine children (half or full-day session, single service).
    - a) *Storage:* Adequate cool, ventilated and well-lighted storage area must be provided with shelving and covered bins for storage of staple goods. Food supplies must be stored off the floor and away from walls for cleaning.

b) *Refrigeration:* Food, milk, and other beverages must be refrigerated at or below 45F. Food intended to be served hot shall be kept at 140F or above while being held for serving.
c) *Food Handlers:* All food handlers must follow Health Department hygiene codes in the handling of food, beverages, utensils and equipment.
d) *Cleanup:* Cleaning, dishwashing and sterilization must also follow hygiene regulations.
e) *Contamination:* All sources of contamination by insects, rodents, dust, dirt, or water leakage must be carefully eliminated in the food preparation and serving areas.

Class B: For food service to more than nine children, all requirements of special regulations governing eating and drinking establishments must be observed. These regulations specify more definitive equipment performance and operational procedure. *Note:* Daily menus will be subject to state review for nutritional content. Menus must remain on file for a four-week period.

13. Health:

Physician: A licensed physician must be associated with each center on a consultation basis.
Medical Examinations: Each staff member must have a pre-employment medical examination as well as an annual physical checkup.
First Aid: Designated staff members must attend periodic workshops in first aid emergency training.

14. Qualification of personnel:

The licensee of each center must provide for sufficient number and quality of staff to provide adequate service and supervision at all times.

A. *Program Director:* (5-20 children)
   1. 21 years of age minimum.
   2. High school degree or equivalent.
   3. Two courses of 32 credit hours each in early childhood education.
   4. This person must continue in academic training.

B. *Program Director:* (21-40 children)
   1. 21 years of age minimum.
   2. Two years of college credit from accredited university.
   3. Completed two courses of 32 credit hours each in early childhood education.
   4. This person must continue in academic training.

C. *Program Director:* (more than 40 children)
   1. 21 years of age minimum.
   2. Graduate of accredited 4-year college or university, with specialty in early childhood education.
   3. Minimum of two years of teaching experience in pre-primary education.
   4. Must have demonstrated capabilities in community relations.

D. *Senior Staff Members:* (Primarily responsible for children)
   1. 21 years of age minimum.
   2. High school degree or equivalent.
   3. Completed two courses of 32 credit hours each in early childhood education.
   4. Must continue to participate in active training programs.

E. *Staff Assistant:* (no primary responsibility for children)
   1. 18 years of age minimum.
   2. High school degree or equivalent.
   3. Participation in active training programs.

F. *Staff Aide:* (works directly under supervision of senior staff member)
   1. 16 years of age minimum.
   2. Participation in active training programs.

15. Group sizes:

(Minimum of 2 staff members per group)

Age*	Maximum number
2 years	10
3 years	16
4 years	20
5 years	25

*If children of mixed ages are placed in one group, the average age of the children will determine group size.

16. Program, equipment, furniture:

Many licensing jurisdictions will make recommendations and regulate the program content, equipment and furnishings used in child centers.

17. Record keeping:

In general, records should be maintained and kept available for inspection on the following:
a) Enrollment
b) Staffing
c) Substitute list
d) Menus
e) Daily schedules and child-staff ratios
f) Health records of children

Typical health department and building and zoning code requirements for the licensing, operation, construction or remodeling of child care facilities. *(continued)*

A day care or pre-school facility is generally permitted by right in all zoning categories except:

R-1 One-family detached dwellings
R-2 One-family semi-detached dwellings
R-3 Row dwellings

In the above three categories, a special zoning board approval is necessary, involving hearings and testimony by licensee as well as community members. Usually such use will be permitted upon a finding by the Zoning Board that such use will not constitute a nuisance because of traffic, the number of children being cared for, noise, or type of physical activity.

Generally such schools must conform to the same zoning regulations (front, side, and rear yard setbacks, height of building, floor area ratio, lot occupancy, fire zones, etc.) as other residences in the immediate vicinity, in addition to any special purpose requirements called for by the Board of Zoning Approval.

A day care or preschool facility is generally allowed in any residential zone upon a finding by the Zoning Board that such activity will not constitute a hazard to children or interfere with the existing use of the neighborhood. Further, the land and building or buildings to be used by the child care home must conform with the specific minimum area, frontage, and setback requirements. For example:

1. Child care homes or nursery schools accommodating *not more than five children* at any one time:
    a) total minimum land area required .... 5,000 sq ft
    b) minimum frontage along street .... 50 ft
2. Child care homes accommodating *between five and ten children* at any one time:
    a) total minimum land area required .... 7,000 sq ft
    b) minimum frontage along street .... 70 ft
3. Child care homes or nursery schools accommodating *between ten and twenty children* at any one time:
    a) total minimum land area required .... 10,000 sq ft
    b) minimum frontage along street .... 100 ft
4. Child care homes or nursery schools accommodating *between twenty and forty children* at any one time:
    a) total minimum land area required .... 20,000 sq ft
    b) minimum frontage along street .... 150 ft
5. Child care homes or nursery schools accommodating *more than forty children* at any one time:
    a) total minimum land area required .... 30,000 sq ft
    b) minimum frontage along street .... 200 ft

Parking (if required):
Two off-street spaces for each three teachers and other employees (custodial personnel excepted).

Exit Requirements:

a) Generally, several grade level entrances will be required, preferably leading directly from interior learning spaces to the exterior. Interior courtyards do not qualify as exterior spaces unless they are open on at least one side.
b) A second floor or third floor level usually must have stairways leading directly to the outside, and depending upon the combustibility rating of the building, these may have to be enclosed and fire protected. Frequently, exterior fire escapes will be necessary.
c) Rarely will basement spaces be eligible for occupancy by children, unless at least 1/3 of the room is above ground level and then only when special conditions are met.

Found Objects—A Check List

The Object	A Source . . .	. . . And a Use for It
Automobile tires, inner tubes	Garages, tire companies	Swings, climbers, bouncers
Cable spools	Telephone companies	Gymnastic equipment, tables
Scrap telephone wire	Telephone companies	Crafts. Tie wires for plants
Culvert pipes (round or square)	Storm sewage contractors	Tunnels, trains, planters, seats
Old rowboats	Marinas	Outdoor play objects
Packing crates or appliance cartons	Moving companies, appliance dealers or truckers	Playhouses or cardboard constructions
Carpet rolls	Carpet companies	"A-Frame" constructions
Carpet remnants	Carpet companies	Resting mats, floor covering
Cargo nets and twisted rope	Harbor facilities or surplus stores	Climbing nets, support cables
Railroad ties	Salvage companies, lumberyards	Sand or earth retainers and amphitheatres
Felled trees	Construction sites	Climbing trees, stepping blocks, outdoor seating
Excess fill dirt	Construction sites	Earth mounds
Ceramic tiles	Tile stores	Mosaics, color matching, counting games
Scrap paper	Printing shops	Drawing, painting, cut-outs
Wire mesh	Hardware suppliers	Animal shelters
Scrap lumber and plywood	Lumberyards, building sites	Small constructions
Milk and soft-drink crates	Food markets, soft-drink companies	Wagons, tote trays, storage cubbies
Fruit cartons	Produce stores	Record cabinets, storage, bookshelves and scooters
Cloth remnants	Sewing shops, tailors, garment manufacturers, your attic	Painting and collage work, wall hangings
Bricks, masonry blocks, clay flue tiles	Brickyards, building and demolition sites	Spacers for bookshelves
Scrap linoleum	Flooring companies	Work surface coverings
Juke-box record selector	Vending machine companies	Audio tape selector
Polyethylene rolls	Building supply companies	Lining for clay, sand or water containers
Computer tape or movie film cans	Computer companies, film supply houses	Tape together for seats
Corrugated cardboard	Paper or building supply companies	Variety of constructions
Movable type	Printing houses	Block and letter printing
Plastic garbage cans	Hardware stores	Clay storage, catch-all containers
Pipe scaffold	Painting or plastering contractors, building supply stores	Climbing or display rack
Used washing machines, stoves, refrigerators	Appliance dealers or department stores, classified advertisements	Kitchen equipment
Old ladders	Fire department	Gymnastic equipment
Surplus plant material	Nurseries, garden centers, park department	Planting and landscaping
Pipe lengths	Plumbing companies	Pipe frame constructions
Telephone poles	Telephone companies	Climbing and jumping constructions
File cabinets	Office supply and surplus stores	Office equipment
Adding machines, typewriters	Office supply and surplus stores	Learning media
Discarded automobile	Junk yards or police department	Play car
Old mattress	Your basement	Jumping pad, reading corner

Check with your local sanitation department for discarded bulk objects.

appendix

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Directory of Centers in This Book

KEY:
NAME OF INSTITUTION
(a) Address
(b) Sponsorship
(c) Director
(d) Designer

THE ACORN SCHOOL
(a) 330 East 26th Street, New York, N.Y. 10010
(b) Private school
(c) Doris Schwartz
(d) Mayers and Schiff, architect

ADVENTURE PLAYGROUND FOR HANDICAPPED CHILDREN
(a) 56 Old Church Street, S.W. 3, London, England
(b) London Adventure Playground Association
(c) Dorothy E. Whitaker
(d) Lady Allen of Hurtwood and Robert Howard, architect

ANTELOPE HEAD START CENTER
(a) Mission, S.D. 57555
(b) Project Head Start, Office of Economic Opportunity, HEW Institute of Indian Studies, University of South Dakota
(c) Leslie Williams
(d) Frank Sata, architect

ARLINGTON CHILD DEVELOPMENT CENTER
(a) 2235 South Lincoln Street, Arlington, Va. 22204
(b) Project Head Start, Office of Economic Opportunity, HEW
(c) Barbara Y. Davis

ARTHUR GOLDBERG CENTER
(a) A temporary center no longer existing
(b) Goldberg Campaign Headquarters
(d) Robert Mangurian, Schoolworks

THE BLOCK SCHOOL
(a) 1062 Winthrop Street, Brooklyn, N.Y. 11212
(b) New York City Board of Education
(c) Carol Harris
(d) Hammel, Green, & Abrahamson, architect
Project designers: Ronald W. Haase and Clark Neuringer

BURGUNDY FARM COUNTRY DAY SCHOOL
(a) 3700 Burgundy Road, Alexandria, Va. 22303
(b) Private school
(c) Donald C. Mills
(d) Harold A. Stone

CASADY SCHOOL
(a) 9500 North Pennsylvania Avenue, Oklahoma City, Okla. 73120
(b) Private school
(c) Margaret Loeffler
(d) Benham, Blair & Affiliates, architect

THE PUTNAM SCHOOL
(a) 595 West Putnam Avenue, Greenwich, Conn. 06830
(b) Private school
(c) Susan P. Snow
(d) Raymond F. Pavia, architect

C.L.C. GOOD HOPE ROAD CENTER
(a) 2503 Good Hope Road, S.E., Washington, D.C. 20020
(b) Community Learning Centers, Inc.
(c) Helen Lewis
(d) Margaret F. Skutch and Holt Associates, Inc.
Project designers: Paul S. C. Curtis and Roger Smith

COLUMBIA ROAD PRESCHOOL
(a) 1459 Columbia Road, N.W., Washington, D.C. 20009
(b) Washington Preschools, Inc. (ESEA Title III)
(c) Carol Ginzburg

CORLEARS SCHOOL
(a) 324 West 15th Street, New York, N.Y. 10011
(b) Corlears Community Nursery Schools, Inc.
(c) Irene Neurath
(d) Sidney Spanier, architect

DACHKINDERGARTEN SCHOTTENRING
(a) Vienna, Austria
(b) City of Vienna
(d) Michael Engelhardt

THE EARLY LEARNING CENTER, INC.
(a) 12 Gary Road, Stamford, Conn. 06903
(b) Private school
(c) Margaret F. Skutch
(d) Egon Ali-Oglu, architect
Paul S. C. Curtis and Roger Smith, interior design

EAST HARLEM PRESCHOOL–PROPOSAL
(a) New York City
(b) New York City Board of Education
(d) Hammel, Green & Abrahamson, architect
Project designers: Ronald W. Haase and Clark Neuringer

THE EVERYWHERE SCHOOL
(a) 45 Canton Street, South Arsenal, Hartford, Conn. 06120
(b) South Arsenal Neighborhood Development Corp.
(c) John Wilson
(d) Jack Dollard, architect

HAROLD E. JONES EARLY EDUCATION CENTER
(a) 2425 Atherton Street, Berkeley, Calif. 94704
(b) University of California and Berkeley Public Schools
(c) Dorothy Eichorn and Mildred Messinger
(d) Joseph Esherick & Associates, architect

HEW DAY CARE CENTER
(a) 330 Independence Avenue, S.W., Washington, D.C. 20201
(b) Thiokol/Ogden Division
(c) Edward Wheeler, director
Doris T. McGuffey, child care specialist

Directory of Centers in This Book *(continued)*

KEY:
NAME OF INSTITUTION
(a) Address
(b) Sponsorship
(c) Director
(d) Designer

HILLTOP CENTER
(a) 344 Blue Hill Avenue, Dorchester, Mass. 02121
(b) Project Head Start, Office of Economic Opportunity, HEW
(c) Dolores Paige
(d) PARD-Team, architect
Project architect: Sam Mintz

KLH CHILD DEVELOPMENT CENTER
(a) 38 Lansdowne Road, Cambridge, Mass. 02174
(b) KLH and Massachusetts State Welfare Department
(c) Kate B. Lafayette
(d) Hill & Associates, Inc.

LAKE ANNE NURSERY-KINDERGARTEN, INC.
(a) 1603 Washington Plaza, Reston, Va. 22070
(b) Nonprofit private corporation
(c) Dorothy R. Bearman
(d) Whittlesey & Conklin, architect
Dr. Carol Lubin, consultant

THE LAMPLIGHTER SCHOOL
(a) 11611 Inwood Road, Dallas, Texas 75229
(b) Nonprofit private corporation
(c) Natalie Murray and Marieta Swain
(d) O'Neil Ford & Associates, architect

LITTLE BRICK SCHOOL
(a) Chestnut Hill, Litchfield, Conn. 06759
(b) Private school
(c) Rosemary Hoban

MANHATTAN VALLEY DAY CARE CENTER
(a) 431 Central Park West, New York, N.Y. 10025
(b) Nonprofit institution
(c) Judy Barmak
(d) Robert Mangurian, Schoolworks

NATIONAL CHILD RESEARCH CENTER
(a) 3209 Highland Place, N.W., Washington, D.C. 20008
(b) Nonprofit private corporation
(c) Janet E. Weaver
(d) Chapman & Miller, architect

NATIONAL DEMONSTRATION CENTER IN EARLY CHILDHOOD EDUCATION
(a) 400 Maryland Avenue, S.W., Washington, D.C. 20202
(b) U.S. Office of Education
(c) Barry Barnes (Far West Laboratory for Educational Research and Development)
(d) U.S. Office of Education
Consultants: Ronald W. Haase and Clark Neuringer

THE NEW NURSERY SCHOOL
(a) 1203 Fourth Street, Greeley, Colo. 80631
(b) Office of Economic Opportunity and Colorado State College
(c) Oralie McAfee

PACIFIC OAKS
(a) 714 West California Boulevard, Pasadena, Calif. 91105
(b) Private school
(c) David Burke
(d) Frank Sata, architect

PALISADES SWIMMING CLUB PLAYGROUND
(a) P.O. Box 636, Glen Echo, Md. 20768
(b) Community owned corporation
(c) Robert R. Redmon, president
(d) Richard J. Passantino, architect

PHOEBE HEARST PRESCHOOL LEARNING CENTER
(a) 1315 Ellis Street, San Francisco, Calif. 94115
(b) Golden Gate Kindergarten Association
(c) Mary Nordland
(d) William Fox, architect

ROOSEVELT STREET SITE AND PRINCE STREET SITE
(a) Berkeley, Calif.
(b) City of Berkeley
(d) Hirshen and Van der Ryn, architect
Partner in charge: Sanford Hirshen

THE ROSLYN RISE DAY CARE CENTER
(a) 10339 Twin Rivers Road, Columbia, Md. 21043
(b) Interfaith Day Care Center, Inc.
(c) Jesse Osborne

SEA MILLS INFANT SCHOOL
(a) Bristol, England
(b) Bristol Education Department
(c) M. O. Nash

SEA PINES MONTESSORI SCHOOL
(a) Hilton Head Island, S.C. 29928
(b) Sea Pines Plantation
(c) Sally Cook

THE SHADY LANE SCHOOL
(a) 6319 Walnut Street, Pittsburgh, Pa. 15206
(b) Nonprofit private corporation
(c) Eleanor Bergholz
(d) Paul S. C. Curtis and Roger Smith

SUFFOLK STREET PLAYGROUND
(a) 130-136 Suffolk Street, New York, N.Y. 10002
(b) Lower East Side Neighborhood Association
(d) Smotrich & Platt, architect

WESTMORELAND DAY CARE AND NURSERY SCHOOL
(a) 1 Westmoreland Circle, Washington, D.C. 20016
(b) Westmoreland Congregational Church
Montgomery County Child Day Care Association
(c) Patsy Hosch

WOODMONT CENTER
(a) 2001 Woodmont Boulevard, Nashville, Tenn. 37215
(b) American Child Centers, Inc.
(c) Earline Kendall
(d) Yearwood & Johnson, architect

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